

**FEBRUARY 7, 2013** 

# ANALYSIS OF THE BASIC HEALTH PROGRAM OPTION

HAWAI'I DEPARTMENT OF COMMERCE & CONSUMER AFFAIRS, INSURANCE DIVISION

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# **Executive Summary**

Under the Affordable Care Act(ACA), beginning in 2014 health insurance coverage opportunities for individuals with incomes below 400% of the Federal Poverty Level (FPL) are greatly expanded through Federal funding of expanded Medicaid programs and health insurance premium and cost sharing subsidies available to certain qualifying individuals through a state's Exchange. The ACA also outlines a process by which states may establish a Basic Health Program (BHP), a separate state run health program funded by Federal dollars to cover certain low-income individuals that do not qualify for Medicaid. For the most part, individuals covered through a BHP would be comprised of adults with incomes between 138% and 200% FPL; however legal residents with incomes below this level would also qualify.¹ The ACA anticipated that states could establish a BHP as early as January 1, 2014. However, on February 6, 2013 as this report was being finalized, the U.S. Department of Health and Human Services (HHS) issued a series of FAQs. One of those FAQs indicated that the earliest date of implementation for a BHP has been revised to January 1, 2015, with final guidance anticipated to be issued in 2014

In states that establish a BHP, those eligible for the BHP would not be eligible for subsidized coverage through the Connector. States establishing a BHP would receive Federal funding equal to 95% of the advance premium tax credits (APTCs) and cost sharing subsidies that would have been expended had the individual instead participated in the Connector. In turn, states must use this Federal funding to provide coverage to BHP enrollees that is at least as comprehensive and affordable as the individual would have received through the Connector. Any excess funding may only be used to increase the benefits covered, reduce member cost sharing or increase reimbursement to providers.

The BHP is often described as a program to provide an affordable bridge between public and private insurance coverage. Health plans that participate in Medicaid may not elect to participate in the commercial market, or vice versa. Therefore as individuals "churn" in and out of Medicaid eligibility status, they may be able to maintain coverage with the same provider under a BHP option, and at a cost which is more affordable than the subsidized premium and cost sharing offered through the Connector.

While the BHP appears to represent the potential for states to reduce the number of uninsured, while at the same time lowering costs and increasing the continuity and quality of care for these low-income adults, there are still many unanswered questions. A short-term, yet very significant, consideration for policy makers is the absence of Federal regulations related to the funding and operation of a BHP. Currently, the only provisions governing the operation of a BHP are those found in Section 1331 of the ACA. Without this additional guidance, estimates of the financial cost of operating a BHP, the effects on enrollment in the Connector, the impact on risk pools and related

<sup>1</sup> At this time it is uncertain whether the COFA population would be eligible for the BHP. The State is currently working with both HHS and the IRS to determine this population's eligibility.

premiums in the individual market, and details around the Federal payments that will be made to states presented in this report must be used with caution.

There are several choices to be made by states in designing a BHP. These include whether to build the program off of existing public programs or take more of a commercial design. Premium and cost sharing requirements should be designed with consideration given to both affordability and mitigation of adverse selection. Decisions about premium, cost sharing and provider reimbursement levels will impact the financial feasibility of the BHP.

The Hawai'i Department of Commerce & Consumer Affairs (DCCA) engaged Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) to assist the State of Hawai'i (the State) in their assessment of the feasibility of establishing a BHP. The purpose of this report is not to advocate for or against a BHP, but rather to provide an overview of the feasibility of the BHP at this time, and to address policy options for Hawai'i policy makers, stakeholders and the public.

The process of assessing the financial feasibility of a BHP option for Hawai'i included the following steps:

- Microsimulation modeling to estimate the size as well as demographic, morbidity and income characteristics of the population eligible for coverage through the Connector, as well as estimating the subsets likely to enroll in the BHP and the Connector;
- Microsimulation modeling to estimate the second lowest Silver level premium to be offered in the Connector;
- Calculate the Federal APTCs and cost sharing subsidies that would be made available to fund the BHP, based on the estimated second lowest Silver level premium;
- Estimate the premiums, if any, that would be required to fund healthcare benefits for the BHP population if Medicaid benefits were provided at Medicaid provider payment rates;
- Calculate the difference between the estimated Federal BHP subsidies available and the estimated BHP premium;
- Perform sensitivity analysis to identify risk factors that could significantly alter the results;
- Present the conclusion about financial feasibility and policy options to the State.

The analysis presented in this report builds upon prior microsimulation modeling performed by Oliver Wyman, the results of which include but are not limited to estimates of the size, income distribution, demographics, and morbidity of the BHP eligible population and the second lowest cost Silver premium. A description of Oliver Wyman's Healthcare Reform Microsimulation Model can be found in Appendix A. Details of this prior analysis can be found in the report titled "Impact of the Affordable Care Act on the Hawai'i Marketplace" prepared for the Hawai'i DCCA.

<sup>&</sup>lt;sup>2</sup> Tammy Tomczyk, Randall Fitzpatrick and Joshua Sober, "Impact of the Affordable Care Act on the Hawai'i Marketplace." February 2013.

## **Financial Modeling**

To assess the financial feasibility of establishing a BHP in Hawai'i, Oliver Wyman developed a deterministic actuarial BHP model. The model projects expected claims of the BHP population and Federal subsidy revenue for 2014 through 2018 using the assumptions that are described within the report. In modeling the dynamics that underlie the BHP's viability, we focused on three primary assumptions: possible enrollment, funding sources, and claim costs. While there are many other dynamics that will affect the financial viability of a BHP (e.g., provider and carrier participation, member outreach, etc.), we focused on these three primary assumptions. Our modeling resulted in approximately 25,000 individuals enrolling in the BHP.

The financial viability of the BHP is dependent on a number of key factors, some of which can be controlled by the State (to a certain extent). These factors include but are not limited to provider reimbursement levels, member premium, member cost sharing and benefits provided. We developed annual pro forma BHP projections for 2014 through 2018 under several scenarios. In all of the scenarios modeled, we project a deficit in 2014 with the deficit decreasing over time. In a subset of the scenarios, we show the program results in a surplus in later years under several scenarios. The following table presents a summary of these results for the scenarios presented in this report. It is important to note that the projections provided *do not include* an estimate for the administrative costs that would be incurred by the State to set-up and maintain a BHP.

Year 2014 2015 2016 2017 2018 Total (\$4,480,000) \$13,080,000 Baseline Scenario \$1,820,000 \$3,610,000 \$9,310,000 \$23,340,000 Alternate Scenario 1 (\$44,100,000) (\$40,670,000) (\$40,550,000) (\$35,450,000) (\$32,300,000) (\$193,070,000) Alternate Scenario 2 (\$12,900,000) (\$7,210,000) (\$5,770,000) (\$200,000) \$3,430,000 (\$22,650,000) Alternate Scenario 3 (\$9,550,000) (\$4,320,000) (\$1,910,000) \$3,990,000 \$5,800,000 (\$5,990,000)

Table 1.1: Program Surplus/Deficit Under Various Scenarios

Our baseline scenario assumes the following key assumptions:

- **Covered Services** Services covered are equal to those covered by the Medicaid program plus coverage for habilitative services, pediatric dental and vision services.
- **Provider Reimbursement** The BHP reimburses providers at Medicaid levels. This is assumed to equate to approximately 48% of reimbursement levels to commercial providers.
- *Member Premium* BHP enrollees have no premium contribution requirement.
- Member Cost Sharing BHP enrollees have 100% coverage for all services.
- *Morbidity* The morbidity of the BHP population would be consistent with the microsimulation modeling performed.
- Merged versus Non-merged Market The small group and individual markets are not merged.

Each of the three alternate scenarios reflects the same assumptions as in the baseline scenario, with the exception of the noted changes below:

- **Alternate Scenario 1** Provider reimbursements are increased to 70% of reimbursement levels to commercial providers, roughly equal to Medicare reimbursement levels.
- Alternate Scenario 2 Morbidity is 10% higher than in the baseline scenario.

Alternate Scenario 3 – The individual and small group commercial markets are merged.

The financial feasibility analysis indicates that the BHP may be a viable option for Hawai'i over the long-term, and that it may be able to be operated at no cost to the State other than the cost to administer the program. This conclusion is based on the assumption that the BHP covers the same benefits as currently provided through the MedQuest program and that provider reimbursements under the BHP are equivalent to current Medicaid reimbursement levels. The continuously improving financial position of the program over time is due to several factors including premium subsidies that grow at a leveraged rate as a result of commercial premiums that grow faster than incomes, commercial premiums that grow at a rate faster than claims based on a Medicaid reimbursement levels, the wear-off of the Federal Transitional Reinsurance Program, which holds premiums and therefore subsidies down in the first three years, and the phase-in of a new insurer tax.

## **Feasibility Caveats**

Although the BHP appears to be financially feasible in the long-term, implementation of a BHP comes with an element of risk to the State and the estimates in this report should be considered preliminary pending additional Federal guidance on key aspects of funding for the BHP. Changes in other healthcare marketplace factors could also influence the results.

For example, the gap between the estimated premium subsidy and projected healthcare cost to cover the BHP population is driven largely by the significant estimated differential in Medicaid versus commercial provider reimbursement rates. If the State increases Medicaid reimbursement rates from the levels used in this analysis, it would alter the conclusions made in this report.

An additional caveat to the BHP modeling, calculations and conclusions contained in this report include the unknown variation of the Silver level premiums offered in the Exchange. Our modeling estimates that the premium for the second lowest Silver level plan for a 40 year old non-smoker offered in the Connector will be \$268 per member per month (PMPM) in 2014, or that the Silver level premiums offered in the Connector will be tightly clustered around this value. However, should there be a wide variation in Silver level premiums offered in the Connector (e.g., if they range from a low of \$250 to a high of \$300 PMPM) the BHP subsidies will be lower than those modeled here, and the net cost to the State of offering a BHP could be higher than shown here.

## **Policy Considerations**

One purpose of this report is to provide State policy makers and stakeholders with a compilation of options to consider as Hawai'i contemplates whether to implement the BHP at this time. This report also highlights potential risks associated with implementing a BHP given Federal regulations related to the funding and operation of a BHP have not yet been released.

## Impact of Movement between Medicaid, the BHP and the Connector

The design for the Connector and possible "churn" of individuals between Medicaid, the BHP and the Connector are important to address. Individuals between 138% - 200% FPL are likely to experience fluctuations in income throughout the year, causing them to migrate between these various benefit plans. On the one hand, a BHP program can serve as a bridge between Medicaid and the Exchange, offering a mix of plans and products and a more gradual phasing-in of member premium and cost sharing requirements to consumers as they transition between programs. Low-

income families with children enrolled in the State's CHIP program may be able to maintain coverage with the same provider under a BHP option. On the other hand, the BHP creates an additional transition point across the spectrum, requiring the coordination of three programs instead of two.

## Medicaid and BHP Provider Availability and Access

Although the BHP may be a separate program from Medicaid, our modeling indicates that for the BHP to be financially feasible, reimbursement rates to providers would need to be near Medicaid levels. One consideration for policy makers and stakeholders contemplating a BHP is the potential impact of additional patients at or near Medicaid reimbursement levels on provider availability and access. The ACA creates a new standard for Medicaid which will allow states to extend childless adults and families below 138%<sup>3</sup> FPL in 2014 with significant funding from the Federal government. Implementing a BHP would further increase the patient base served by Medicaid providers by approximately 25,000 additional individuals.

## Impact on the Low-income Population

While the presence of premium and cost sharing subsidies in the Connector will make coverage much more affordable in 2014 than it is today for those with incomes between 138% and 200% FPL, the amount that these individuals are still responsible for can represent a significant portion of their income in some cases. The subsidized premiums are a fixed percentage of income ranging from 2% to 6.3% for the under 200% FPL population. The out-of-pocket cost sharing they are responsible for will represent 6% to 13% of the medical claims incurred, on average. The following tables present the estimated average monthly cost a 40-year old non-smoker of average morbidity would have to pay for subsidized premium and cost sharing in the Connector, at various income levels, in 2014.

Table 1.2: 2014 Subsidized Premium and Cost Sharing in the Connector

Income as a % of FPL	Average Monthly Subsidized Premium <sup>4</sup>	Average Monthly Subsidized Cost Sharing <sup>5</sup>	Total Average Monthly Out-of- Pocket Costs	Total Average Costs as a Percent of Income
70%	\$16	\$112	\$127	16.3%
100%	\$22	\$25	\$47	4.2%
138%	\$50	\$25	\$75	4.9%
144%	\$58	\$25	\$83	5.2%
150%	\$67	\$54	\$121	7.2%
175%	\$100	\$54	\$154	7.9%
200%	\$140	\$54	\$194	8.7%

Figures in the table may not sum due to rounding

<sup>&</sup>lt;sup>3</sup> 133% plus a 5% income disregard.

<sup>&</sup>lt;sup>4</sup> Based on projected 2014 FPL levels for Hawai'i.

<sup>&</sup>lt;sup>5</sup>Costs for those with incomes below 100% are greater than those at 100% FPL based on previously stated current interpretations that individuals below 100% FPL are not eligible for cost sharing subsidies and would be required, on average, to pay 30% cost sharing.

Those with incomes just above the Medicaid level have resources which are still very limited and can become strained in high cost of living states such as Hawai'i. Enrollees in the State's Medicaid program currently pay no premium or cost sharing, and they may have difficulty affording the premium and cost sharing for coverage offered through the Connector, even with the subsidies that will be available to them. If the State is able to implement a BHP with no premium or cost sharing requirements, the financial burden on these low-income individuals will be reduced. However, it is important to note that this would produce a larger financial "cliff" at 200% FPL as individuals with incomes that increase above this threshold would migrate from free healthcare benefits to paying \$194 per month, on average.

## Impact on the State

Policy makers and stakeholders must consider which state entity will be responsible for the design, implementation and operation of the BHP. Many studies assume that the BHP will be operated by the State agency responsible for administering Medicaid. This reasoning is driven by the fact that the populations are similar enough to leverage existing processes and policies for benefit administration. In fact, many States, including Hawai'i, have implemented Medicaid expansion programs designed to provide some level of coverage to single adults and childless adults between the State's Medicaid FPL and 200% of the FPL. Although other entities such as the Connector could administer the BHP, the financial feasibility is dependent on providers serving BHP clients at fee structures near Medicaid levels.

As discussed above, Federal funds received for the BHP program may only be used to lower premiums, reduce cost sharing, or increase benefits. Therefore, it appears states may not use a portion of these funds to cover the cost of administrative expenses associated with running the program. While it might make sense to build upon DHS' MedQuest program, this would likely mean DHS would need additional administrative resources. Not only would DHS need to be able to serve more people and oversee the quality of care in the program, they would also be required to take on additional new functions.

The ACA also requires Federal oversight of a BHP program. Each year the Secretary of HHS will conduct a review of the program to ensure compliance. The State would likely need to meet various reporting requirements to aid in the Secretary's review, and it is unknown what types of policy decisions the Federal government could impose on Hawai'i through these oversight powers.

The State would also be required to operate a separate trust fund into which Federal payments for the program are received. However, in the absence of BHP regulations, it is difficult to know exactly what the State's responsibilities would be at this time, and what funds could be used to cover their cost.

It is critical that States accurately estimate the amount of Federal funding they will receive and the cost of implementing a BHP program. Our sensitivity analysis indicates there are significant risks for the program to run at a deficit if careful planning is not undertaken. In addition to needing regulations to provide clarification as to funding, risk adjustment and year end reconciliation processes, the State is also exposed to potential reductions in funding if either commercial carriers

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<sup>&</sup>lt;sup>6</sup> Section 1331(d) of the ACA.

or the Connector is successful at holding down premiums in the individual market, as this translates into lower funding for the BHP.

## Impact on the Hawai'i Connector

The Connector must be self-sustaining by January 1, 2015. Therefore, it is reasonable to be concerned about shrinking the pool of eligible members from which the Connector may be funded. Our estimate of those who would enroll in the BHP in 2014 is approximately 25,000. These low-income individuals represent approximately 20% of the total potential Connector enrollment of 115,000 in the low take-up scenario, and approximately 13% of the total potential Connector enrollment of 179,000 in the high take-up scenario. Thus implementing a BHP and removing this population from the Connector enrollment could decrease the economies of scale of operating the Connector and raise the per capita operational costs. In addition, access to fewer customers could make the Connector a less attractive market for carriers. Actual evaluation of Connector financial sustainability was beyond the scope of this report.

#### Summary

Several states have studied the feasibility of a BHP, however only a few have made a strong move in the direction of establishing one. Washington, for example, already operates a program of this type and passed a bill to ensure that its model complied with the terms of the ACA. Massachusetts passed legislation establishing a BHP, but is awaiting Federal regulations. <sup>7</sup> California introduced a bill on December 3, 2012 to establish a BHP.<sup>8</sup>

While the results of our financial feasibility analysis indicate that the BHP could potentially be a viable option for Hawai'i in the future, the lack of Federal regulations to provide more details related to the operation and financing of a BHP program and other areas of uncertainty create several risks that the State must consider if it decides to move forward with implementing a BHP at this time. These include but are not limited to:

- Lack of clarification as to whether the State would receive 95% or 100% of the cost sharing subsidies:
- Uncertainty as to whether the State would receive a cost sharing subsidy for those under 100% FPL:
- Lack of information as to how the financial reconciliation process will work for those whose
  income for the year retrospectively impacts the level of premium and cost sharing subsidies
  they are eligible for;
- How payments to the State will be adjusted for risk of the BHP population, including risk adjustment and reinsurance payments;
- Whether plans can offer benefits with 80% and 90% actuarial values or whether they will be required to offer coverage at the higher 87% and 94% levels BHP eligible individuals would receive in the Connector;
- How to demonstrate that the minimum 85% loss ratio is met; and

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<sup>&</sup>lt;sup>7</sup> Part I, Title XVII, Chapter 118E.

<sup>8</sup> Senate Bill 20.

• Whether the risk pools of the BHP and the individual commercial risk pool can be combined.

Given the many uncertainties listed above and the potential risk the State could be taking, it may wish to delay implementation of a BHP at this time and consider further analysis once regulations have been issued by the Federal government that will provide answers to these questions. Delaying implementation also affords the State the opportunity to examine early actual experience and enrollment in the Connector once they become known (e.g., details such as the number of individuals between 138% - 200% FPL that enroll and their corresponding morbidity).

## Disclaimer

The Hawai'i Department of Commerce & Consumer Affairs (DCCA) engaged Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) to assist the State of Hawai'i (the State) in their assessment of the feasibility of establishing a Basic Health Program (BHP) as defined in Section 1331 of the Affordable Care Act (ACA). Many of the inputs into the BHP modeling described in this report are results of microsimulation modeling Oliver Wyman performed to assess the impact of the Affordable Care Act on the Hawai'i marketplace. Additional details of that microsimulation modeling can be found in the report titled *Impact of the Affordable Care Act on the Hawai'i Marketplace*, also prepared for DCCA. A description of Oliver Wyman's Healthcare Reform Microsimulation Model can be found in Appendix A.

Consistent with Paragraph 24 of the General Conditions of the Contract for Professional Services, this report was prepared for the sole use by the State. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the State. This report is not intended for general circulation or publication, nor is it to be used or distributed to others for any purpose other than those that may be set forth herein or in the definitive documentation pursuant to which this report has been issued. The estimates included within were based on regulations issued by the United States Department of Health and Human Services, several of which are still in draft form. Our work may not be used or relied upon by any other party or for any purpose other than for which they were issued by Oliver Wyman. Oliver Wyman is not responsible for the consequences of any unauthorized use.

All projections are based on the information and data available at a point in time, and the projections are not a guarantee of results which might be achieved. The projections are subject to unforeseen and random events and so must be interpreted as having a potentially wide range of variability. Further, the estimates set forth in this report have been prepared before all regulations needed to implement the ACA have been issued, including clarifications and technical corrections, and without guidance on complex financial calculations that may be required. Specifically, regulations related to the funding and operations of a BHP have not yet been released. The State is responsible for all financial and design decisions regarding the ACA. Such decisions should be made only after the State's careful consideration of alternative future financial conditions and legislative scenarios, and not solely on the basis of the estimates illustrated within this report.

For our analysis, we relied on a wide range of data and information and other sources of data as described in this report. This includes information received from commercial carriers currently offering coverage in the State and various State agencies. Though we have reviewed the data for reasonableness and consistency, we have not independently audited or otherwise verified this data, and it should also be noted that our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions may need to be revised.

In addition, the projections we show in this report are dependent upon a number of assumptions regarding the future economic environment, medical trend rates, carrier behavior, the behavior of individuals and employers in light of incentives and penalties, and a number of other factors. These assumptions are disclosed in our report and have been discussed with DCCA and other key stakeholders. While this analysis complies with applicable Actuarial Standards of Practice and Statements of Principles, users of this analysis should recognize that our projections involve estimates of future events, and are subject to economic, statistical and other unforeseen variations from projected values. To the extent that future conditions are at variance with the assumptions we have made in developing these projections, actual results will vary from our projections, and the variance may be substantial.

Finally, Oliver Wyman is not engaged in the practice of law and this report, which may include commentary on legal issues and regulations, does not constitute, nor is it a substitute for legal advice. Accordingly, Oliver Wyman recommends that the State secures the advice of competent legal counsel with respect to any legal matters related to this report or otherwise.

This report is intended to be read and used as a whole and not in parts. Separation or alteration of any section or page from the main body of this report is expressly forbidden and invalidates this report.

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The information contained in this document and in any of the attachments is not intended by Oliver Wyman to be used, nor can it be used, for the purpose of avoiding penalties under the Internal Revenue Code or imposed by any legislative body on the taxpayer or plan sponsor.

# Introduction and Background

DCCA engaged Oliver Wyman to assist in assessing the feasibility of a BHP option, as defined in Section 1331 of the ACA. The decision of whether or not to create a BHP is an important one for the State of Hawai'i. Oliver Wyman was asked to assist the State in understanding its potential effects, and to model the potential financial impact of the BHP. For most states, a feasibility determination is based primarily on whether the BHP option can be implemented at little or no cost to the state (i.e., entirely funded by Federal subsidies). However, in addition to examining the financial feasibility of the program, other non-financial items such as the impact on the size of the Connector, the impact on the uninsured rate, and the impact on premiums in the individual market may also be of particular interest to the State.

Under the ACA and beginning in 2014, health insurance coverage opportunities for individuals with incomes below 400% of the Federal Poverty Level (FPL) are greatly expanded through Federal funding of expanded Medicaid programs and health insurance premium and cost sharing subsidies available to certain qualifying individuals through a state's Exchange. In addition, beginning in 2014 the ACA also provides states with the option of establishing a BHP, a separate state run health program to cover certain low-income individuals that do not qualify for Medicaid. A BHP could offer financial security to low-income residents by ensuring access to affordable and stable coverage. While the ACA anticipates that states could establish a BHP as early as January 1, 2014, the U.S. Department of Health and Human Services (HHS) issued a series of FAQs on February 6, 2013 just as this report was being finalized. One of those FAQs indicated that the earliest date of implementation for a BHP has been revised to January 1, 2015, with final guidance anticipated to be issued in 2014.

The BHP is often described as a program to provide an affordable bridge between public and private insurance coverage. Health plans that participate in Medicaid may not elect to participate in the commercial market, or vice versa. Therefore as individuals "churn" in and out of Medicaid eligibility status they may be able to maintain coverage with the same providers under a BHP option, and at a cost which is more affordable than the subsidized premium and cost sharing offered through the Connector.

## **Eligibility**

The ACA outlines the following specific requirements that must be met in order for an individual to be eligible for coverage in a BHP<sup>9</sup>:

- Resident of the state who is a U.S. Citizen or a lawfully present immigrant;
- Has not attained age 65 as of the beginning of the plan year;
- Modified Adjusted Gross Income at or below 200% FPL;

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<sup>&</sup>lt;sup>9</sup> Section 1331(e)(1) of the ACA.

- Ineligible for Medicaid, Medicare, CHIP, Military/CHAMPUS, TRICARE, Veteran's Health Care, or other public minimum essential coverage; and
- Has no access to employer-sponsored coverage that meets the ACA's minimum standards for affordability and comprehensiveness.

Within the context of the ACA, affordable employer-sponsored coverage is defined as coverage for which the employee is not required to contribute more than 9.5% of family income toward the cost of premiums for single coverage, regardless of the cost for dependent coverage. The presence of the Hawai'i Prepaid Health Care Act (PHCA), which caps the employee contribution for single coverage at 1.5% of income for most employees, means very few individuals will fail this test. Comprehensive coverage is defined as a benefit plan that provides minimum essential coverage, having an actuarial value of 60% or more. The provides minimum essential coverage, having an actuarial value of 60% or more.

The ACA requires states to maintain 2009 CHIP eligibility levels through 2019,<sup>12</sup> however the legislation only provides extension of funding through October 2015.<sup>13</sup> If Congress does not extend the funding beyond 2015, many children who now qualify for coverage under CHIP could also qualify for the BHP. For purposes of this analysis, we have assumed that funding for CHIP will be extended, limiting eligibility to adults between the ages of 19 and 64.

Therefore, there are two primary groups of individuals that are assumed to meet the requirements to be covered by a BHP:

- Low-income adults with incomes between 138%<sup>14</sup> 200% FPL; and
- Lawfully present immigrant adults with incomes below 138% but whose immigration status makes them ineligible for Medicaid. This group includes, for example, immigrants who have been lawfully present in the United States for less than five years.

It is our understanding that at the time of this report, the State is working with the HHS and the Internal Revenue Service (IRS) to obtain guidance on whether citizens of Micronesia, Palau, and the Marshall Islands who are authorized to live and work in the United States under the Compact of Free Association (COFA) are eligible for participation in the BHP. Our baseline scenarios discussed later in this report assume the COFA population is eligible for the BHP.

If the State elects to establish a BHP, these BHP-eligible individuals would not be eligible to purchase subsidized coverage through the Connector. Instead, these individuals would be eligible to enroll in coverage through health plans or providers contracted with the State, offering at least the level of coverage required of plans provided through the Connector.

<sup>&</sup>lt;sup>10</sup> Section 1331(e)(1)(c) of the ACA and Section 5000A(e)(2) of the Internal Revenue Code of 1986.

<sup>&</sup>lt;sup>11</sup> Section 1331(e)(1)(c) of the ACA and Section 5000A(f) of the Internal Revenue Code of 1986.

<sup>&</sup>lt;sup>12</sup> Section 2001(b) of the ACA.

<sup>&</sup>lt;sup>13</sup> Section 10203 of the ACA.

<sup>&</sup>lt;sup>14</sup> The ACA sets the eligibility threshold at 133% FPL but provides for an additional 5% income disregard, creating an effective cut-off at 138% FPL.

If the State does not elect to offer a BHP, these individuals would have access to products offered through the Connector, with access to premium and cost sharing subsides based on their income level.

## **Plan Design Requirements**

Most aspects of the design of the BHP benefits are left to the discretion of the states, subject to the following requirements outlined in the ACA.<sup>15</sup>

- The program must cover at a minimum the state specific Essential Health Benefits (EHBs) required to be covered by plans offered through the Connector;
- Member premiums cannot exceed the premiums that would have been paid through the Connector based on income level:
- For individuals with incomes up to 150% FPL, cost sharing cannot exceed Platinum level cost sharing requirements of 10%;
- For individuals with incomes between 150% and 200% FPL, cost sharing cannot exceed Gold level cost sharing requirements of 20%;
- The BHP must operate as either a managed care system or offer similar benefits of care management (e.g., fee-for-service plus enhanced primary care case management may work);
- Plans must be selected through a competitive process, including negotiation of premiums, cost sharing, care management and additional benefits;
- When offered through a health insurer the plan medical loss ratio can be no less than 85%;
- To the extent feasible, the consumer should be offered a choice of plan options; and
- The BHP must coordinate administration with Medicaid and CHIP.

Key provisions of the law conflict with regard to the maximum cost sharing requirements that can be imposed on individuals enrolled in a BHP. Section 1331(a)(2)(A)(ii) defines the BHP cost sharing to be no greater than that for the Platinum level (i.e., 10%) for individuals with incomes up to 150% FPL and no greater than that for the Gold level (i.e., 20%) for individuals with incomes between 150% and 200% FPL. However, Section 1402(c)(2) defines cost sharing for individuals enrolled in an Exchange with incomes between 100% - 150% FPL as no more than 6% and cost sharing for individuals with incomes between 150% - 200% FPL as no more than 13%. It seems reasonable that forthcoming regulations related to the funding and operation of a BHP may in fact clarify that the lower cost sharing under Section 1402(c)(2) that would be made available to individuals enrolled in an Exchange should also be set as the maximum allowed under the BHP. However, at this time this issue remains uncertain.

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<sup>&</sup>lt;sup>15</sup> Section 1331(a) through (c) of the ACA.

## Contracting

As mentioned above, the ACA requires states to select plans using a competitive process, including negotiation of premiums, cost sharing, care management and additional benefits. As part of this process the State must consider:<sup>16</sup>

- Innovative features for care coordination for enrollees with chronic conditions, incentives for the use of preventive services, and establishment of provider/patient relationships that work to maximize patient involvement in healthcare decision making;
- Allowance for differences in healthcare needs among enrollees as well as differences in the availability and accessibility of local providers;
- Consideration of the degree to which contractors maintain the attributes of managed care systems given the local healthcare markets in which they operate; and
- The use of performance measures for issuers of standard health plans that focus on quality
  of care and improved health outcomes, including the requirement that plans report
  measures and standards to the State and make performance and quality information
  available to enrollees.

Those eligible to offer plans include "health maintenance organizations, licensed health insurers, or a network of healthcare providers established to offer services under the program."<sup>17</sup>

Through discussions with the State, a Medicaid managed care delivery system was selected as the basis for modeling a BHP. Reimbursement levels in a Medicaid managed care delivery system are typically lower than commercial health plans, and building a BHP on a state's Medicaid infrastructure would allow states to cover low-income parents and children together in similar plans and by the same provider networks. Research has shown that dropout rates among children covered in Medicaid and CHIP programs are significantly lower when a parent or sibling is also covered by public insurance.<sup>18</sup>

## **Program Design and Administration**

States have flexibility in designing the BHP in their state to best meet the needs of their low-income population. Again, without Federal regulations the type of administration that would be allowed is not entirely clear, however the BHP may be able to be administered in one of the following ways:

• As a separate stand-alone program – The BHP would operate as a program separate from the State's current Medicaid and CHIP programs;

<sup>&</sup>lt;sup>16</sup> Section 1331(c)(2) of the ACA.

<sup>&</sup>lt;sup>17</sup> Section 1331(g).

<sup>&</sup>lt;sup>18</sup> Benjamin Sommers, "Insuring Children or Insuring families: Do Parental and Sibling Coverage Lead to Improved Retention of Children in Medicaid and CHIP?," Journal of Health Economics, 2006; Vol. 25, Issue 6, pp. 1154-1169.

- As Medicaid-like program A single Medicaid program providing all low-income residents with Medicaid coverage provided to those below 138% FPL and CHIP benefits between 138-200% FPL<sup>19</sup>:
- As a CHIP program for adults CHIP for low-income adults and children between 138%-200% FPL, using Title XXI funds for children and BHP funds for adults<sup>20</sup>; and
- A two-way bridge program BHP eligible consumers choose between Medicaid plans and plans offered in the Connector.

## **BHP Financing**

The primary financing for a BHP will come from Federal funding. The amount of funds received from the Federal government will equal 95% of the advance premium tax credits (APTCs) plus (depending upon how HHS interprets the ACA) either 100% or 95% of the cost sharing subsidies the BHP enrollees would have received had they instead enrolled in the Connector. In addition, the BHP may charge a member premium, as long as it is not greater than the subsidized premium the member would have been required to pay for the second lowest cost Silver level coverage in the Connector.

#### Federal BHP Advance Premium Tax Credits

The APTC is defined as the premium for the second lowest Silver level benefit plan based on a non-tobacco user at the individual's age and geography, less the subsidized member share of premium as determined by the applicable premium offset percentage, as specified in Table 3.1 below.

Table 3.1: Subsidized Premium (as a Percent of Income)<sup>21</sup>

Income Range as a % of FPL	Low End of Range Premium Offset %	High End of Range Premium Offset %
≤ 100%	2.00%	2.00%
100% - 133%	2.00%	3.00%
133% - 150%	3.00%	4.00%
150% - 200%	4.00%	6.30%

Table 3.2 below shows the applicable 2014 member premium contribution at various income levels, based on an estimate of \$13,330 as the Hawai'i specific 100% FPL for a single adult.<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> Title XIX, Title XXI, and BHP funds would still likely need to remain segregated with the BHP funds in a separate trust account.

<sup>&</sup>lt;sup>20</sup> Title XXI and BHP funds would still likely need to remain segregated with the BHP funds in a separate trust account.

<sup>&</sup>lt;sup>21</sup> Section 1401(b)(3)(A)(i) of the ACA.

<sup>&</sup>lt;sup>22</sup> \$13,330 was calculated as the 2012 FPL level of \$12,860 projected forward using the statutory formula outlined in Section 673(2) of the Omnibus Budget Reconciliation Act (OBRA) of 1981 (42 U.S.C. 9902(2)) and CPI estimates from the 2011 Social Security Trustees Report, Table V.B.1.

Table 3.2: 2014 Subsidized Premiums in the Connector

FPL Level	Annual Income <sup>23</sup>	Premium Offset Percentage	Annual Subsidized Premium	Monthly Subsidized Premium
70%	\$9,331	2.00%	\$187	\$16
100%	\$13,330	2.00%	\$267	\$22
138%	\$18,395	3.29%	\$605	\$50
144%	\$19,195	3.65%	\$701	\$58
150%	\$19,995	4.00%	\$800	\$67
175%	\$23,328	5.15%	\$1,201	\$100
200%	\$26,660	6.30%	\$1,680	\$140

Figures in the table may not sum due to rounding

The 138% FPL level is used in this table because individuals with income below this level will be covered by Medicaid (133% FPL plus a 5% income disregard). Each month, the BHP will receive 95% of the difference between the premium for the second lowest cost Silver level benefit plan based on a non-tobacco user at the individual's age and geography, and the amounts shown in the far right column in the table above.

## Federal BHP Cost Sharing Subsidies

Low-income individuals that enroll in the Connector will receive cost sharing subsidies when they enroll in Silver level coverage. Silver level coverage represents a plan with a 70% actuarial value. In other words, the cost sharing requirements of the plan are designed so that on average the plan will pay 70% of allowable charges and the enrolled individual will pay 30%.

According to Section 1402(c)(2) of the ACA, individuals with incomes between 100% - 150% FPL receive cost sharing subsidies such that the effective actuarial value of the coverage they receive is enhanced to 94% (with the enrollee paying an average of 6% cost sharing) and those between 150% - 200% FPL have plans with an effective actuarial value of 87% (with the enrollee paying on average 13% cost sharing). Figure 3.1 demonstrates the portion of claims anticipated to be paid by the member, the health plan, and in the case of members receiving subsidized coverage, the amount paid by the Federal cost sharing subsidy, for various benefit levels.

<sup>&</sup>lt;sup>23</sup> Annual income amounts reflect Hawai'i specific FPL levels.

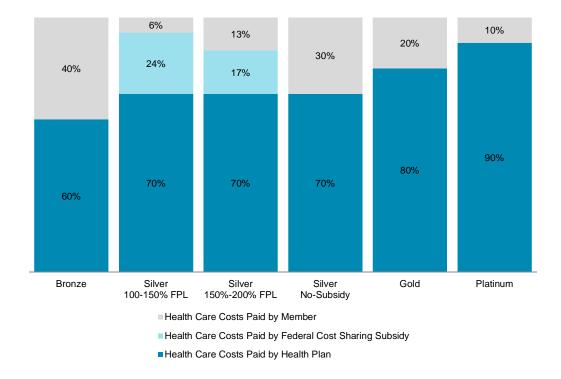


Figure 3.1: Cost Sharing Percentages by Benefit Level

Provider reimbursement levels under commercial policies sold through the Connector (upon which subsidies are based) are anticipated to be significantly higher than those paid by the Medicaid program. Consequently, the Federal payments received by the BHP may exceed the cost of providing BHP adults with Medicaid-like coverage, despite a higher anticipated morbidity of the BHP population. Using a BHP to fund coverage would allow the State to substitute Federal dollars for some beneficiaries previously enrolled in the Quest-ACE and Quest-NET programs, and at the same time allow them to receive richer and perhaps Medicaid-like benefits without significantly increasing costs to the State.

If a state establishes a BHP, it must also establish a special trust into which the Federal funds are deposited. If the state is able to operate its BHP at a lower cost than the amount of the Federal funding available, excess funding may only be used within the BHP for the following<sup>25</sup>:

- Reducing premiums;
- Reducing cost sharing requirements;
- Enhancing benefits by:
  - o Increasing the services covered, or
  - o Increasing payments to providers.

<sup>&</sup>lt;sup>24</sup> Current Medicaid reimbursement levels are estimated to be approximately 48% of commercial levels.

<sup>&</sup>lt;sup>25</sup> Section 1331(d) of the ACA.

Options for enhancing benefits might include increasing reimbursement for services that are difficult to obtain or reducing cost sharing for services that could reduce utilization of emergency room services or inpatient admissions. Excess funds may not be used for non-BHP purposes, or to cover the state's cost of administering the program. No trust fund money can be included in determining the amount of any non-Federal funds for purposes of a state meeting any Federally funded program's matching or expenditure requirement.<sup>26</sup>

#### Reconciliation

If APTCs and cost sharing subsidies paid by the Federal government are over or under estimated throughout the year, a reconciliation process will occur at year end.<sup>27</sup> An adjustment for the reconciliation amount would be applied to the following year's payments to the State. This puts the State at risk for providing coverage to an individual that retrospectively is not eligible to participate in the BHP. At this time, the precise nature of this reconciliation has yet to be specified by Federal officials, adding a level of uncertainty for State officials.

Further it is unclear how the Federal government will adjust the BHP payments, both prospectively and through reconciliation. The ACA indicates that payments should be calculated on a per enrollee basis and that they should consider "the age and income of the enrollee, whether the enrollment is for self-only or family coverage, geographic differences in average spending for healthcare across rating areas, the health status of the enrollee for purposes of determining risk adjustment payments and reinsurance payments that would have been made if the enrollee had enrolled in a qualified health plan through an Exchange, and whether any reconciliation of the credit or cost sharing reductions would have occurred if the enrollee had been so enrolled."<sup>28</sup>

While basing APTCs and cost sharing subsidies on the appropriate second lowest Silver premium offered through the Connector would appear to adjust for family tier and geography as required, without Federal regulations it is unclear what adjustments would be made for risk adjustment payments and transitional reinsurance payments. Risk adjustment will be applied to the statewide individual market on a retrospective basis, with transfers occurring between carriers both inside and outside the Connector and netting to zero across the entire market. Further, for the years 2014 through 2016 reinsurance payments would be made from a Federally established fund, of a fixed amount as defined in the ACA, to carriers offering individual coverage both inside and outside the Connector to offset large claims. It is our understanding based on the Notice for Benefit and Payment Parameters for 2014 released by HHS on November 30, 2012 that these transfer payments between carriers would not impact APTCs or cost sharing subsidies in the individual market.

Without further regulations, it is also unclear at this time whether BHP enrollees would be included as part of the individual market of the State for purposes of determining payments under these programs. Based on microsimulation modeling previously performed,<sup>30</sup> the average morbidity of the

<sup>&</sup>lt;sup>26</sup> 42 USC § 18051(d).

<sup>&</sup>lt;sup>27</sup> Section 1331(d)(3)(B) of the ACA.

<sup>&</sup>lt;sup>28</sup> Section 1331(d)(3)(A)(ii).

<sup>&</sup>lt;sup>29</sup> 45 CFR Part 153.

<sup>&</sup>lt;sup>30</sup> Tammy Tomczyk, Randall Fitzpatrick and Joshua Sober. "Impact of the Affordable Care Act on the Hawai'i Marketplace." February 2013.

individuals predicted to enroll in the BHP is worse than the average morbidity of those predicted to remain in the individual market. Therefore, it appears including the BHP in these programs would result in increased revenue to the State. However, given the uncertainty as to how these adjustments will work, our modeling that follows makes no adjustment for these items at this time.

#### Would a BHP Work in Hawai'i?

There may be substantial benefits to both the State and low-income residents in adopting a BHP in Hawai'i. However there are many questions key stakeholders within the State must answer prior to making a decision, such as those that follow. This report is intended to assist stakeholders in answering these and other questions.

- Can Hawai'i operate a BHP with the funding that will be made available to the program from the Federal government?
- Are there any risks to the State in operating a BHP?
- How many residents would be covered by the BHP?
- What level of provider reimbursement would be required to make the program feasible?
- What level of premium and cost sharing would those enrolled in a BHP be required to pay for the program to be sustainable?
- What impact would implementing a BHP have on the Connector in terms of risk profile and enrollment?
- What impact would implementing a BHP have on the uninsured rate?

# Data and Methodology

To assess the financial feasibility of establishing a BHP in Hawai'i, Oliver Wyman developed a deterministic actuarial BHP model. The model projects expected claims of the BHP population and Federal subsidy revenue for 2014 through 2018 using the assumptions that are described within this section. A detailed description of the BHP model is provided within Appendix B.

#### Hawai'i Basic Health Plan Market

In modeling the dynamics that underlie the BHP's viability, we focused on three primary assumptions: possible enrollment, funding sources, and claim costs. There are many other dynamics that will affect the financial viability of a BHP (e.g., provider and carrier participation, member outreach, etc.). As these interactions are harder to assess and model, we focused on the three primary assumptions.

Please note that many of the key assumptions supporting this analysis result from Oliver Wyman's Healthcare Reform Microsimulation Model (HRM Model). We refer the reader to the report discussing the assumptions and methods supporting that model for specification of those key assumptions, "Impact of the Affordable Care Act on the Hawai'i Marketplace."

#### **BHP Enrollment**

Enrollment assumptions are developed from the HRM Model. In particular, the model provides BHP enrollment by age, income, and prior coverage status for each projection year. Enrollment by income is expressed within income ranges, and the ranges are selected to retain consistency with Federal subsidy levels.

In addition, the HRM Model is built to produce enrollment projections under various rating rules environments. In particular, the model produces BHP enrollment estimates both under a merged individual and small group as well as under a non-merged market. It is our understanding that Hawai'i has made the decision to expand the definition of small group to 100 in 2014 and we maintain that assumption throughout our modeling.

It is also our understanding that Hawai'i's Department of Human Services (DHS) is currently engaged in discussions with HHS and the IRS to determine whether the COFA population will be eligible to enroll in the BHP. Although their eligibility is not yet certain, we assume in this analysis that the COFA population is eligible for the BHP. In the event the COFA population is not eligible for the BHP, our modeling results would need to be updated. In Table 4.1 on the following page, we summarize the modeled 2014 BHP enrolled population by age and income that resulted from our scenario based microsimulation modeling.

Table 4.1: 2014 BHP Population by Age and Income

	Income by FPL								
Age Band	< 100%	100% – 138%	139% – 150%	151% – 200%	All Incomes				
19-26	700	100	900	2,900	4,600				
27-29	200	0	800	1,400	2,400				
30-39	700	600	1,000	4,500	6,800				
40-49	1,000	500	400	4,400	6,300				
50-59	600	0	1,000	2,800	4,400				
60-64	0	0	300	600	900				
All Ages	3,200	1,200	4,400	16,600	25,400				

Projected membership under 138% of FPL represents primarily the COFA population. In the event this population in not eligible for the BHP, the estimated membership would decrease, all other things equal.

In making our estimates it is assumed that 100% of those previously enrolled in QuestNET, QuestACE, or individual coverage that meet the income requirements for the BHP would enroll. These individuals would not be eligible for Medicaid or subsidized individual coverage through the Connector, and the single point of entry through the Connector would ensure these individuals are directed to enroll in the BHP program.

We also assumed that 100% of those with current employer sponsored coverage that meet the eligibility requirements for the BHP would enroll. However, the presence of the PHCA and the corresponding cap on employee contributions of 1.5% of income means that most families would not fail the ACA affordability test, precluding them from meeting the eligibility requirements for the BHP. Therefore, our simulation modeling resulted in very few individuals with current employer sponsored coverage enrolling in the BHP.

Only 85% of the uninsured population that is eligible for the BHP was assumed to take up coverage. One might anticipate that anybody eligible would take up coverage considering the cost of coverage is minimal. However, this assumption is consistent with what is realized in the Medicaid program.<sup>31</sup> This phenomenon may be result of eligible people that are unaware of the program, those who enroll only when they have acute healthcare needs, or some other reason.

## Federal Funding

As discussed earlier, the funding for the BHP will primarily be from Federal subsidies. The state would receive 95% of APTCs and either 95% or 100% of the cost sharing subsidies<sup>32</sup> that would have otherwise been received had the member enrolled in Silver coverage through the Connector. Given this uncertainty with regard to the cost sharing subsidies which is anticipated to be clarified in forthcoming regulations, Oliver Wyman assumed the State would receive 95% of the cost sharing subsidies as a conservative estimate.

<sup>&</sup>lt;sup>31</sup> Dec 2012 Robert J. Wood Foundation Study of 2009/2010 enrollment: http://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf403218

<sup>&</sup>lt;sup>32</sup> ACA §1391(d)(3)(A)(i). The statute is unclear whether the state will receive 100% or 95% of the cost sharing subsidies.

## Federal BHP Premium Subsidy

To calculate the Federal BHP premium subsidy, the HRM Model produces estimates of the applicable second lowest cost silver plan premium sold through the Connector. For the BHP model, we rely on the HRM Model's estimate of the second lowest cost Silver level plan premium for a 40-year old non-smoker. Once we have this specific Silver level plan premium from the HRM Model, we estimate the premiums at all other ages so they reflect the standardized age curve proposed by HHS in the preamble to the draft Health Insurance Market Rules regulations published on November 26, 2012.<sup>33</sup> For example, if the 40-year old non-smoker Silver level plan premium in 2014 is \$282.08 per member per month (PMPM), then the premium for all ages would reflect the following:

**Table 4.2: Premium for Various Ages** 

Age	Factor	Premium	Age	Factor	Premium	Age	Factor	Premium
19	0.635	140.16	35	1.222	269.72	51	1.865	411.65
20	0.635	140.16	36	1.230	271.49	52	1.952	430.85
21	1.000	220.72	37	1.238	273.26	53	2.040	450.28
22	1.000	220.72	38	1.246	275.02	54	2.135	471.24
23	1.000	220.72	39	1.262	278.55	55	2.230	492.21
24	1.000	220.72	40	1.278	282.08	56	2.333	514.95
25	1.004	221.61	41	1.302	287.38	57	2.437	537.90
26	1.024	226.02	42	1.325	292.46	58	2.548	562.40
27	1.048	231.32	43	1.357	299.52	59	2.603	574.54
28	1.087	239.93	44	1.397	308.35	60	2.714	599.04
29	1.119	246.99	45	1.444	318.72	61	2.810	620.23
30	1.135	250.52	46	1.500	331.09	62	2.873	634.14
31	1.159	255.82	47	1.563	344.99	63	2.952	651.58
32	1.183	261.12	48	1.635	360.88	64	3.000	662.17
33	1.198	264.43	49	1.706	376.55			
34	1.214	267.96	50	1.786	394.21			

As noted, the premiums in Table 4.2 reflect the relativities indicated by the HHS proposed age factors.

In order to assess the Federal BHP premium subsidy, we first estimated the premium that a subsidy-eligible policyholder would have to pay in the Connector for the second lowest cost Silver level plan. The subsidized member premium will vary by the individual's income, but it will not vary by age, and it is not dependent on the actual premium for the second lowest cost Silver level plan. Table 4.3 shows the estimated monthly member premium by income for that Silver level plan by FPL range in 2014.

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<sup>&</sup>lt;sup>33</sup> http://www.gpo.gov/fdsys/pkg/FR-2012-11-26/pdf/2012-28428.pdf.

Table 4.3: Estimates of Subsidized Individual Member Premium – 2014

Percent of FPL	Point Estimate	Mid-Point Income*	Member Premium Percent	Monthly Member Premium
<100.0%	70.0%	\$9,331	2.00%	\$15.55
100.0%-138.0%	119.0%	\$15,863	2.50%	\$33.05
139.0%-150.0%	144.5%	\$19,262	3.50%	\$56.18
151.0%-200.0%	175.5%	\$23,394	5.17%	\$100.85

<sup>\* 100%</sup> FPL is estimated to be \$13,330

The Federal premium subsidy for each individual enrolled in the BHP will be 95% of the premium subsidy the individual would have received had they enrolled in the second lowest cost Silver level plan in the Connector. For the sample 40-year old non-smoker in Table 4.2, the Silver level premium was \$282.08 PMPM. If a 40-year old non-smoker were enrolled in the BHP and had an income equal to 119.0% FPL in 2014, the Federal premium subsidy would be \$236.58 PMPM (or 95% x (\$282.08 - \$33.05)) based on the estimated subsidized premium in Table 4.3.

## Federal BHP Cost Sharing Subsidy

We have also estimated the reimbursement the State would receive for member cost sharing under the BHP. As previously noted, the regulations for the BHP have not yet been released, and it is not clear how the Federal government will calculate the states' reimbursement for the cost sharing subsidy. Section 1331(d)(3)(A)(i) of the ACA defines the Federal BHP subsidies as, "... equal to 95 percent of the premium tax credits under section 36B of the Internal Revenue Code of 1986, and the cost sharing reductions under section 1402." We interpret this as the Federal cost sharing subsidy would equal either 95% or 100% of the subsidy that would have been received in the Exchange<sup>34</sup>. In addition, there is a possibility that the Federal reimbursement will have some recognition of the BHP population's experience (e.g., through a risk adjustment factor). Due to lack of published regulations at the time this report was completed, it is assumed the cost sharing subsidy will be a function of the second lowest cost silver plan and the income of the covered individual.<sup>35</sup> For individuals with incomes between 100% - 150% FPL the subsidized actuarial value is 94%, and it is 87% for individuals with incomes between 150% - 200% FPL. Please note, consistent with how we interpret the ACA, we have assumed that there is no cost sharing subsidy for BHP eligible members with income below 100% of FPL.36 If the government were to adjust the reimbursement based on utilization or morbidity of the actual population, we expect that the reimbursement would be higher than what is shown in this report.

<sup>&</sup>lt;sup>34</sup> There is current debate as to whether this provision should be interpreted as 95% of the premium tax credits and 95% of the cost sharing subsidies, or if the comma separating the two means that the cost sharing credits are not subject to the 95% rule and, in fact, will be paid in full.

<sup>&</sup>lt;sup>35</sup> The specific function we use to estimate these reimbursement payments is [Second Lowest Cost Silver Premium] x [Expected Pricing Loss Ratio] / [Transitional Reinsurance Credit] / [Silver Plan Actuarial Value] x [Actuarial Value for Subsidized Silver Level Plan- Actuarial Value for Silver Level Plan] x 0.95.

<sup>&</sup>lt;sup>36</sup> This would include the COFA population below 100% if eligible for the BHP. The State is currently in discussions with the IRS and CMS to determine if this population would be eligible for the BHP. In the event this population is not eligible for the BHP our modeling would need to be revised.

#### **Claim Costs**

As with the funding assumptions, there is significant uncertainty around the potential claims cost of those enrolled in a BHP.

## **Primary Assumptions**

In developing our estimate of claim costs, we started with the premium of a 40-year old insured for the second lowest Silver level plan in the individual market that resulted from our microsimulation modeling. We assumed that the priced for medical loss ratio would be 80%. This loss ratio assumption is consistent with the assumption used to develop premiums in the microsimulation modeling. Further, between 2014 and 2016 a transitional reinsurance program is in effect for the individual commercial market. The purpose of this temporary program is to phase in the upward pressure on premiums due to changes in the morbidity of the population covered in the individual market. While this program will provide premium relief in the short term it will not impact the underlying claims cost. Therefore, to estimate the claims cost for the BHP population the first step was to multiply the second lowest cost Silver level plan premium by the target 80% loss ratio, and divide by the premium impact of the transitional reinsurance.

We expect that claims will vary with age for BHP enrollees, and we reflect that expectation in our estimates. Specifically, we assumed that claims would vary by age in the same proportion as what we assumed in the microsimulation modeling.

In support of our review of a BHP's feasibility, the State facilitated an engagement between Oliver Wyman and the State's Medicaid actuary. As part of this engagement, we were provided information and data characterizing Hawai'i's Medicaid population. In particular, the information provided included utilization statistics for Med-QUEST members for various medical services. Using the fee schedule from the Med-QUEST Division's website, we were able to estimate average costs for Medicaid members for the specified services. Using our proprietary claims data for commercial insureds in Hawai'i, we were also able to estimate typical commercial unit cost provider fees for the same subset of services. Then, using the same Medicaid utilization weights provided, we were able to estimate average costs for Medicaid members under the same specified services at commercial reimbursement rates. With these two estimates (i.e., average Medicaid costs at Medicaid reimbursement and average Medicaid costs at commercial reimbursement), we were able to estimate the average difference between Medicaid reimbursement and commercial reimbursement. Specifically, we estimated that Medicaid reimburses providers approximately 48% of the rate reimbursed by commercial insurers. As such, our baseline scenario included the assumption that provider reimbursements for BHP enrollees would be 48% of the reimbursement from commercial carriers in the individual market.

As we understand Hawai'i's current Medicaid benefits, the covered services are nearly identical to the proposed EHB benefits that must be offered in the commercial market (i.e., HMSA's Preferred Provider Plan). There are two primary differences between the two benefit designs. The commercial EHB design does not cover transportation services, while Medicaid does. Also, the Medicaid benefits do not cover in vitro fertilization, while the commercial EHB design does. As a result of the benefit differences, it is estimated that the EHB plan is 0.8% richer than the Medicaid benefits. To be conservative, we have not applied a benefit adjustment within the BHP model. Note, we have assumed that habilitative services, pediatric dental and vision services would need to be provided

by the BHP even if Medicaid benefits are proposed. Our analysis assumes the BHP offers Medicaid benefits with the addition of habilitative services, pediatric dental and vision services.

The claim costs also need to be adjusted to reflect the difference in the member's actual cost sharing and the Silver level plan cost sharing. As part of the proposed HHS Notice of Benefit and Payment Parameters for 2014,<sup>37</sup> HHS assumed an induced demand factor for members receiving a cost sharing reduction adjustment. Specifically, HHS assumed that members with an income under 200% FPL receiving cost sharing assistance on a Silver level plan would incur 12% more costs than they would without the assistance. In the BHP, we have assumed that members with no cost sharing would incur 13% more costs than they would under the Silver level plan cost sharing.<sup>38</sup>

## **Morbidity**

As the reader will find in subsequent sections, the morbidity of the BHP population is critical in assessing the feasibility of this program. It is particularly important when considered relative to the morbidity of individuals covered by policies purchased through the Connector. If the individuals in the BHP have similar morbidity to those with individual policies, Federal subsidies could provide a significant share of the funding necessary to cover these individuals' claim costs (i.e., depending on provider reimbursement levels, et al). If the BHP enrollees have a much higher morbidity than those with individual coverage, then the feasibility of the program will be more challenging.<sup>39</sup>

For our analysis, we have assigned morbidity to each member in the base population. This base population (none of which would currently have coverage through the BHP) is processed through the HRM Model. The model then records the aggregate morbidity of both the BHP eligible population and the population of those electing to enroll in individual policies for each scenario. This aggregate morbidity reflects assumptions about the health of the uninsured, individual, employer sponsored and Medicaid populations that all blend into the BHP population.

Because this morbidity assumption is critical, much of the discussion we provide here on the BHP morbidity is included in the report *Impact of the Affordable Care Act on the Hawai'i Marketplace*, which discusses in detail the Microsimulation modeling that was performed.

The Current Population Survey (CPS), which is conducted by the Census Bureau, provides the starting assumptions for the population morbidity. CPS includes a self-reported health status indicator as well as fields classifying income, coverage type and other categories. Respondents to the survey classify their health into one of five categories; we then reflect these classifications numerically by assigning them the following cost relativities:

<sup>&</sup>lt;sup>37</sup> http://www.gpo.gov/fdsys/pkg/FR-2012-12-07/pdf/2012-29184.pdf.

<sup>&</sup>lt;sup>38</sup> Base scenario model assumes no member cost sharing compared to 0.94 AV for members under 150% FPL.

<sup>&</sup>lt;sup>39</sup> Federal subsidies are based the premium in the Connector i.e. morbidity of members enrolled in the Connector.

**Table 4.4: Self-Reported Health Status** 

Category	Morbidity
Excellent	1.00
Very Good	1.10
Good	1.70
Fair	1.90
Poor	5.90

It is important to note that the data in the CPS models reflect certain anomalies. For example, using the values above and the responses from Hawai'ians in CPS, the average morbidity for individuals that purchase individual coverage is higher than the morbidity of those that have coverage through an employer. Carriers that provide individual coverage in Hawai'i are currently allowed to reject applicants that they assess as too unhealthy, but no such latitude is available for carriers providing coverage to small groups. And so, it seems unrealistic that the morbidity of the direct purchase population would be higher than the morbidity of the employer sponsored population. In addition, we have observed this anomaly in other states, both in work that we have done and in work that states have contracted through other consulting groups. Based on observations from other markets and proprietary data sources, we adjusted the individual morbidity measures so they were consistent with our expectations.

In addition, we employed data from several other sources to assess the appropriate Medicaid morbidity. Specifically, we relied on data provided by the State's Medicaid actuary; data from the Medical Expenditure Panel Survey (MEPS); and data from a proprietary claims database. Our final estimate of the Medicaid morbidity is a blend of two methods. First, a linear regression to estimate differences in billed charges by income was developed using the MEPS data. The regression analysis was controlled for differences in age, gender, and insurance status. The second method is a comparison of the Medicaid data provided by the State's Medicaid actuary to commercial costs from our proprietary claims database. Starting from the base Medicaid claim costs, we adjust the data to commercial reimbursement levels and recognize the utilization that we would expect in the presence of cost sharing. We then compare these adjusted claim costs to estimates of commercial claims using the proprietary data set. The final claim cost relativity is a blend of the two methods.

Ultimately, we estimated that specified key populations would exhibit the following relative costs as a consequence of their morbidity alone:

**Table 4.5: Morbidity Adjustments** 

Coverage Type	Morbidity
Mid Group (51 – 100)	0.996
Small Group (< 50)	1.000
Individual	0.816
Medicaid	1.603
Uninsured	1.020

<sup>&</sup>lt;sup>40</sup> Billed charges were used to normalize for differences in provider reimbursement between different insurance coverage.

As stated earlier, these morbidities translate to costs, following individuals through the HRM Model to their ultimate expected coverage categories. Subsequently, the BHP model includes an adjustment to reflect the expected cost differences for enrollees in the BHP relative to the resultant individual market.

## Additional Assumptions

There were a number of additional assumptions that we employed in the estimates. In particular, we assumed that medical claims trend for the BHP enrollees would be 2% lower than the trend in the individual commercially insured market. Medicaid provider reimbursement levels historically trend at a much lower rate than what is observed in the commercial market. As part of our baseline scenario, we assumed that provider reimbursement under the BHP will be consistent with provider reimbursement with Medicaid. We also assumed that the BHP population would exhibit utilization and cost changes that are generally consistent with the Medicaid population.

Consistent with assumptions in the HRM Model, we applied a pent up demand adjustment to enrollees that had not had coverage in the year preceding the modeled year. For this specific adjustment, we assumed these enrollees would use 10% more services in the first year of coverage than a typical enrollee of similar age and income.

## **Financial Results**

The financial viability of the BHP is dependent on a number of key factors, some of which can be controlled by the State (to a certain extent). These factors include but are not limited to provider reimbursement levels, member premium, member cost sharing and benefits provided. In this section, we provide annual pro forma BHP projections for 2014 through 2018 under several scenarios. Additional detailed output from our modeling efforts can be found in Appendix C. In all of the scenarios described below, we project a deficit in 2014 with the deficit decreasing over time and resulting in a surplus in later years under several scenarios. It is important to note that the projections provided within this section *do not include* an estimate for the administrative costs that would be incurred by the state to set-up and maintain a BHP.

As previously noted, it is our understanding that Hawai'i's DHS is currently engaged in discussions with HHS and the IRS to determine if the COFA population will be eligible to participate in the BHP. Although their eligibility is not yet certain, we assume in this analysis that the COFA population is eligible for the BHP. Furthermore, based on our current interpretation of the ACA, our modeling results assume Hawai'i would not receive a Federal cost sharing subsidy for enrollees with incomes below 100% FPL. It is our understanding the State is also investigating this assumption as it is not completely clear. In the event our assumptions are not realized, our modeling results would need to be updated.

#### **Baseline Scenario Results**

Under the baseline scenario, we made the following key assumptions:

- **Provider Reimbursement** The BHP reimburses providers at Medicaid levels. This is assumed to equate to approximately 48% of reimbursement levels to commercial providers.
- *Member Premium* BHP enrollees have no premium contribution requirement.
- Member Cost-sharing BHP enrollees have 100% coverage for all services.
- *Morbidity* The morbidity of the BHP population would be consistent with the microsimulation modeling results as previously described.
- Merged versus Non-merged Market The small group and individual markets are not merged.

Table 5.1: Baseline Scenario Results

Year	2014	2015	2016	2017	2018	Total
Members	25,400	27,000	26,900	25,800	24,300	129,400
Premium Subsidy PMPM	\$203	\$224	\$240	\$273	\$304	\$248
Cost Sharing Subsidy PMPM	\$58	\$60	\$62	\$64	\$71	\$63
Federal Revenue PMPM	\$261	\$284	\$302	\$337	\$375	\$311
Federal Revenue Total	\$79,710,000	\$92,130,000	\$97,480,000	\$104,420,000	\$109,520,000	\$483,260,000
Claim Cost + 15% Admin PMPM	\$276	\$279	\$291	\$307	\$330	\$296
Total Cost	\$84,190,000	\$90,310,000	\$93,870,000	\$95,110,000	\$96,440,000	\$459,920,000
Program Deficit / Surplus PMPM	(\$15)	\$6	\$11	\$30	\$45	\$15
Program Deficit / Surplus	(\$4,480,000)	\$1,820,000	\$3,610,000	\$9,310,000	\$13,080,000	\$23,340,000

As the table above shows, the program moves from a deficit in 2014 to a surplus in 2015 and beyond. The program improvement largely results from our assumption that claim costs (and thus premium and Federal funding) in the commercial market will grow faster than claim costs in the BHP. As noted in the previous section, we have assumed that trend in the commercial market will be 2% higher than trend in the BHP. The table also shows the calculated Federal cost sharing subsidy. For these estimates, we have assumed that the reimbursement will be a function of the second lowest cost Silver level plan. Furthermore, the 2014 through 2016 premium subsidies are impacted by the individual market temporary reinsurance program, which is expected to encourage carrier participation in an environment of great uncertainty around the morbidity of the newly covered population. The magnitude of the deficit/surplus is a result of the projected membership in the program. A \$1 PMPM change on 25,000 members has a \$300,000 change in the annual results.

The table also shows a relatively static membership. Because of the "no-wrong-door policy" (as it is called because members are steered into only the coverage they are eligible for based on their income and available coverage types), members that are eligible for the BHP either take coverage in the BHP or go uninsured. Some members become ineligible as their salaries grow with inflation and the BHP is no longer an option for them.

#### Alternate Scenario 1 – Increased Provider Reimbursement

The program results are sensitive to a number of the assumptions. For example, provider reimbursement at 48% of commercial reimbursement levels may be an aggressive assumption. Providers are likely to face an influx of new patients under the ACA. With such an increase in demand for services, they may be unwilling to negotiate with the BHP managed care organizations for rates as low as 48% of commercial reimbursement.

Under the Alternate Scenario 1 we made the following key assumptions:

- **Provider Reimbursement** The BHP reimburses providers at 70% of commercial reimbursement levels. This is within the range we expect providers are paid for Medicare.
- Member Premium BHP enrollees have no premium contribution requirement.
- Member Cost Sharing BHP enrollees have 100% coverage for all services.

- Morbidity The morbidity of the BHP population would be consistent with the microsimulation modeling results as described in prior section of this report.
- Merged versus Non-merged Market The small group and individual markets are not merged.

Table 5.2: Alternate Scenario 1 Results – Increased Provider Reimbursement

Year	2014	2015	2016	2017	2018	Total
Members	25,400	27,000	26,900	25,800	24,300	129,400
Premium Subsidy PMPM	\$203	\$224	\$240	\$273	\$304	\$248
Cost Sharing Subsidy PMPM	\$58	\$60	\$62	\$64	\$71	\$63
Federal Revenue PMPM	\$261	\$284	\$302	\$337	\$375	\$311
Federal Revenue Total	\$79,710,000	\$92,130,000	\$97,480,000	\$104,420,000	\$109,520,000	\$483,260,000
Claim Cost + 15% Admin PMPM	\$406	\$410	\$427	\$452	\$485	\$435
Total Cost	\$123,810,000	\$132,800,000	\$138,030,000	\$139,870,000	\$141,820,000	\$676,330,000
Program Deficit / Surplus PMPM Program Deficit / Surplus	(\$145) (\$44,100,000)	(\$126) (\$40,670,000)	(\$126) (\$40,550,000)	(\$114) (\$35,450,000)	(\$111) (\$32,300,000)	(\$124) (\$193,070,000)

If the BHP were to negotiate provider reimbursement levels consistent with Medicare it is estimated that the program deficit over the projection period would be \$193 million, all other things equal. In the baseline scenario we projected a \$23 million surplus. A 46% increase in provider reimbursement levels results in a \$216 million decrease from the base scenario.

## Alternate Scenario 2 - Increased Morbidity

There is a great deal of uncertainty around what the actual health of the BHP population might be. For this second alternative scenario, we assumed that the population morbidity would be 10% higher than the morbidity in our baseline scenario.

Under the Alternate Scenario 2 we made the following key assumptions:

- Provider Reimbursement The BHP reimburses providers at 48% of commercial reimbursement levels.
- Member Premium BHP enrollees have no premium contribution requirement.
- Member Cost Sharing BHP enrollees have 100% coverage for all services.
- *Morbidity* The morbidity of the BHP population is 10% higher than in the baseline scenario.
- Merged versus Non-merged Market The small group and individual markets are not merged.

Table 5.3: Alternate Scenario 2 Results – Increased Morbidity

Year	2014	2015	2016	2017	2018	Total
Members	25,400	27,000	26,900	25,800	24,300	129,400
Premium Subsidy PMPM	\$203	\$224	\$240	\$273	\$304	\$248
Cost Sharing Subsidy PMPM	\$58	\$60	\$62	\$64	\$71	\$63
Federal Revenue PMPM	\$261	\$284	\$302	\$337	\$375	\$311
Federal Revenue Total	\$79,710,000	\$92,130,000	\$97,480,000	\$104,420,000	\$109,520,000	\$483,260,000
Claim Cost + 15% Admin PMPM	\$304	\$307	\$320	\$338	\$363	\$326
Total Cost	\$92,610,000	\$99,340,000	\$103,250,000	\$104,620,000	\$106,090,000	\$505,910,000
Program Deficit / Surplus PMPM	(\$42)	(\$22)	(\$18)	(\$1)	\$12	(\$15)
Program Deficit / Surplus	(\$12,900,000)	(\$7,210,000)	(\$5,770,000)	(\$200,000)	\$3,430,000	(\$22,650,000)

If the morbidity of the population BHP is 10% higher than what we assumed in the base scenario, the program deficit over the projection period would be \$23 million. This is a \$46 million decrease from the base scenario surplus of \$23 million. On the surface, it may appear the results are more sensitive to a change in provider discounts than morbidity. However, a 46% increase in provider reimbursements from Medicaid to Medicare levels resulted in a \$216 million change from the base scenario as described under the Alternate Scenario 1 section above. This is equivalent to a 10% increase in the provider reimbursement resulting in a \$47 million decrease in the base scenario. Therefore, we estimate a 10% change in provider discounts and morbidity are roughly equivalent.

## Alternate Scenario 3 – Merged Market

We estimated that the decision to merge or not merge the individual and small group markets will have a nominal effect on the BHP enrollment. However, the decision to merge the markets produces a meaningful change on premiums in the individual market. As these premiums are the basis for Federal funding for the BHP, a meaningful change in them will produce a corresponding change in the program results.

Under the Alternate Scenario 3, we made the following key assumptions:

- Provider Reimbursement The BHP reimburses providers at 48% of commercial reimbursement levels.
- Member Premium BHP enrollees have no premium contribution requirement.
- *Member Cost Sharing* BHP enrollees have 100% coverage for all services.
- *Morbidity* The morbidity of the BHP population would be consistent with the microsimulation modeling results as previously described.
- Merged versus Non-merged Market The small group and individual markets are merged.

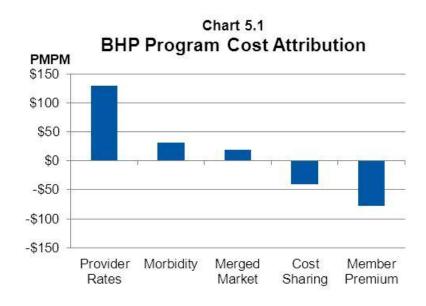
Table 5.4: Alternate Scenario 3 Results – Merged Market

Year	2014	2015	2016	2017	2018	Total
Members	25,400	27,000	26,900	25,800	24,400	129,500
Premium Subsidy PMPM	\$193	\$213	\$230	\$263	\$288	\$237
Cost Sharing Subsidy PMPM	\$56	\$57	\$60	\$62	\$68	\$60
Federal Revenue PMPM	\$249	\$270	\$290	\$325	\$356	\$297
Federal Revenue Total	\$76,120,000	\$87,640,000	\$93,670,000	\$100,850,000	\$104,010,000	\$462,290,000
Claim Cost + 15% Admin PMPM	\$281	\$283	\$296	\$312	\$336	\$301
Total Cost	\$85,670,000	\$91,960,000	\$95,580,000	\$96,860,000	\$98,210,000	\$468,280,000
Program Deficit / Surplus PMPM	(\$31)	(\$13)	(\$6)	\$13	\$20	(\$4)
Program Deficit / Surplus	(\$9,550,000)	(\$4,320,000)	(\$1,910,000)	\$3,990,000	\$5,800,000	(\$5,990,000)

By merging the markets, we estimate the program will show a deficit of \$6 million over the entire period; these results suggest a \$29 million deterioration in performance over the baseline scenario. The main driver of this change is that the projected second lowest cost silver premium in the merged market is roughly \$10 PMPM lower than the premium in the non-merged market, which is resulting in a decrease in projected BHP revenue.

## **Sensitivity Analysis**

For readability, we have only provided pro forma output for a few of the scenarios that were run. To provide the State with a better understanding of the magnitude each of the assumptions may have on the results, we ran 32 BHP scenarios and estimated the effect that each variable change independently has on program costs. The results are shown in the following chart<sup>41</sup>.



<sup>&</sup>lt;sup>41</sup> The results shown in Chart 5.1 reflect a 46% increase in provider reimbursement rates, and a 10% increase in morbidity, and the maximum cost sharing that may be charged to BHP members.

From the chart we can make a number of observations. First, we have estimated that in general program performance will vary proportionally with provider rates and morbidity. For example, a 10% increase in either will have the same effect on the program's financial position. It bears repeating that we have made no assumptions about the interaction of these factors. Lower provider reimbursement rates could introduce access issues for enrollees. Difficulty obtaining services could adversely affect the morbidity of the population. For this model, we have assumed that provider reimbursement and population morbidity do not influence each other.

As expected, a merged small group and individual market worsens the BHP's financial performance. With a merged market, we expect that the premium in the individual market will be lower than in a non-merged market based on our microsimulation modeling. This premium difference will lower the premium subsidies available from the Federal government. If the cost sharing subsidies are also based on the premium in the individual market, the cost sharing subsidies would also be lower under the merged scenario.

Member cost sharing and premium are a means of limiting the State's risk in the BHP. We have estimated that the maximum allowable premium will bring almost twice as much revenue into the program as the maximum allowable cost sharing.<sup>42</sup> As with the provider reimbursement and morbidity alternatives, we have assumed no changes in member behavior resulting from the interaction of the premium and cost sharing assumptions.

#### **Financial Results Over Time**

In reviewing the scenarios above, the reader will notice that in each scenario the feasibility of the program increases over time. This phenomenon warrants additional discussion to fully understand what the key drivers are. There are several factors underlying our modeling that drive this result, as depicted in Figure 5.1 below. Four of these key factors work to reduce program costs, and one offsetting factor works to increase the program cost.

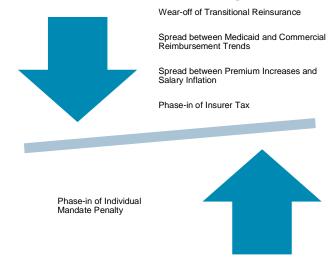


Figure 5.1: Drivers of Reduced BHP Program Costs over Time

<sup>&</sup>lt;sup>42</sup> Maximum premium and cost sharing levels that states may require members enrolled in a BHP to pay are equal to levels the BHP members would be required to pay in the Connector, in the absence of a BHP.

#### Wear-off of Transitional Reinsurance

Between 2014 and 2016, a Federal Transitional Reinsurance program will be in place. The purpose of this temporary program is to phase-in premium increases in the individual market as the influx of new enrollees in that market produce a corresponding increase in population morbidity. The funding for this program decreases over time. <sup>43</sup> As the funding wears off over this three year period, premiums in the individual market will rise at rates faster than medical trend. Since BHP revenues are a function of premium levels in the individual market, this phase-out of the reinsurance program will work to increase the revenue for the BHP program over this period.

### Spread Between BHP and Commercial Provider Reimbursement Trends

The financial feasibility of a BHP over time is significantly affected by the differential between provider reimbursement rates that are used in the BHP and the commercial provider reimbursement rates that underlie the premiums upon which the subsidies to the BHP are based. As provider reimbursement (and consequently the premium) in the commercial market grow at a faster rate than provider reimbursement for the BHP program, the revenue flowing into the program will grow at a faster rate than the underlying claims cost of the BHP members, assuming utilization in both markets grows at the same rate. In our modeling, we assumed that provider reimbursement levels in the commercial market will increase at a rate 2% faster than the reimbursement levels in the BHP.

## Spread Between Premium Increases and Salary Inflation

In recent history, increases in premiums in the commercial market have outpaced increases in salaries. Our modeling assumes premiums will increase for medical trend at an annual rate of 7%<sup>44</sup> while salaries will increase at a rate closer to 3.5%-4.0% over the period modeled.<sup>45</sup> The premium subsidies provided to the BHP are calculated as the difference between the second lowest cost Silver level premium and the subsidized premium the member would have been required to pay if enrolled in the Connector. As such, premiums which increase at a faster rate than salaries will result in subsidies that grow at a leveraged rate over time.

#### Phase-in of Insurer Tax

The ACA imposes a new tax on insurers beginning in 2014. The amount of the tax will be \$8 billion in 2014, increasing to \$14.3 billion in 2018, and will increase based on premium trend thereafter. Oliver Wyman performed an analysis of the impact of this new tax relative to premiums. <sup>46</sup> The impact of the tax is estimated to be approximately 2.1% of premium in 2014, growing to 3.3% of premium by 2018. As this tax is phased-in, premiums may grow at a rate greater than trend. <sup>47</sup> Again, since BHP revenues are a function of premium levels in the individual market, this phase-in of the insurer tax may work to increase the revenue for the BHP program.

<sup>&</sup>lt;sup>43</sup> Funding is \$10 billion in 2014, \$6 billion in 2015 and \$4 billion in 2016.

<sup>&</sup>lt;sup>44</sup> Premiums will grow by more than 7% in the years immediately after 2014 due to changes in morbidity, wear-off of the Transitional Reinsurance Program, and the phase-in of the insurer tax. These items are accounted for elsewhere in the model and not referenced here so as not to double count them.

<sup>&</sup>lt;sup>45</sup> Based on annual projections included in the 2011 Social Security Trustees Report, Table V.B.1

<sup>&</sup>lt;sup>46</sup> Chris Carlson, "Annual Tax on Insurers Allocated by State." Oliver Wyman, 2012.

<sup>&</sup>lt;sup>47</sup> Carriers may not able to increase premiums to cover the cost of the tax and still meet minimum loss ratio requirements, In this case the upward impact on premiums will be less than the increase in the tax over time.

## Phase-in of Individual Mandate Penalty

The penalty individuals will be required to pay if they do not secure minimum essential coverage will also be phased in at a rate that increases rapidly between 2014 and 2016. The low nature of the annual penalty in 2014 (\$95) may cause some individuals not to enroll in the individual market, initially. These individuals would, on average, be in better health than those who do take up coverage in the individual market in 2014. However, as the penalty increases significantly between 2014 and 2016, some of these individuals will elect to take up coverage in 2015 or 2016. This decision of whether or not to take coverage each year is reflected in the HRM model through the application of a utility function. As individuals in better health enter the individual market, their lower morbidity will put downward pressure on premium levels, all else equal. This lower premium translates into lower subsidies for the BHP.

## Policy and Other Considerations

The decision of whether to implement a BHP, and if so when, is an important one for Hawai'i. This section is intended to provide policy makers with additional information on issues that are likely to be impacted differently depending upon whether a BHP is implemented in Hawai'i. The policy considerations discussed include:

- Medicaid churn and the impact on continuity of coverage
- Impact on Medicaid and BHP provider availability and access
- Impact on the low-income population
- Impact on the State
- Impact on the Hawai'i Connector

## **Medicaid Churn**

A BHP has the potential to reduce concerns about maintaining continuity of healthcare coverage for low-income residents whose incomes (as a percent of FPL) are likely to fluctuate above and below the level which qualifies them for Medicaid. As this occurs, individuals are expected to move back and forth between Medicaid and the Connector. This back and forth movement is known as "churning."

Please note that Oliver Wyman attempted to perform Medicaid churn analysis tailored specifically to the State of Hawai'i. Consistent with nationwide research conducted by others, 48 we intended to perform this analysis using the Census Bureau's Survey of Income and Program Participation. This longitudinal data-set provides information about each survey respondent's income and health insurance coverage status over time. However, the data-set included too few individuals to yield credible results for Hawai'i's population. As such, we have relied on research available in the public domain.

#### Churn at 138% FPL

Churning into and out of Medicaid eligibility can occur for several reasons: small changes in income; additions or subtractions to household size due to birth, adoption, or death; and children aging out of CHIP eligibility.

<sup>&</sup>lt;sup>48</sup> Benjamin Sommers and Sara Rosenbaum, "Issues in Health Reform: How Changes in Eligibility May Move Millions Back and Forth Between Medicaid and Insurance Exchanges." Health Affairs 30:2 (Feb. 2011) pp. 228-236.

Connector

Medicaid

Medicaid

Figure 6.1: Medicaid Churn at 138% FPL, No BHP

A recent study of the low-income population estimated that, within six months of initial enrollment, 35% of adults with incomes below 200% FPL will experience a change in income large enough to move them in or out of Medicaid eligibility, and that approximately 50% will experience a similar change within a year. In total, 38% will have churned four times or more over a four year period. In the absence of a BHP, these individuals would move between Medicaid and purchasing coverage in the Connector.

Churning can negatively impact these low-income consumers in several ways. Those with incomes just above the level for Medicaid eligibility may have resources which are still very limited and become strained in high cost of living states such as Hawai'i. Enrollees in the State's Medicaid program currently pay no premium or cost sharing, and they may have difficulty affording the premium and cost sharing for coverage offered through the Connector, even with the subsidies that will be available to them. Table 6.1 below demonstrates the subsidized premium and estimated cost sharing that this low-income population might face in the Connector in 2014 at select income levels.

Table 6.1: 2014 Subsidized Premium and Cost Sharing in the Connector

Income as a % of FPL	Average Monthly Subsidized Premium <sup>50</sup>	Average Monthly Subsidized Cost Sharing	Total Average Monthly Out-of- Pocket Costs	Total Average Costs as a Percent of Income
70%	\$16	\$112	\$127	16.3%
100%	\$22	\$25	\$47	4.2%
138%	\$50	\$25	\$75	4.9%
144%	\$58	\$25	\$83	5.2%
150%	\$67	\$54	\$121	7.2%
175%	\$100	\$54	\$154	7.9%
200%	\$140	\$54	\$194	8.7%

Figures in the table may not sum due to rounding

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<sup>&</sup>lt;sup>49</sup> Benjamin Sommers and Sara Rosenbaum, "Issues in Health Reform: .How Changes in Eligibility May Move Millions Back and Forth Between Medicaid and Insurance Exchanges," Health Affairs 30:2 (Feb. 2011) pp. 228-236.

<sup>&</sup>lt;sup>50</sup> Based on projected 2014 FPL levels for Hawai'i.

The cost sharing estimates shown in the table above are based on prior microsimulation modeling with individual and small group markets that are not merged. The cost sharing reflects that of a 40-year old with average morbidity in the individual market if a BHP is not established, and reflects induced utilization based on the reduced cost sharing requirements for the BHP eligible population. According to Section 1402(c)(2) of the ACA, those with incomes below 100% FPL will not receive cost sharing subsidies and will be required to pay cost sharing based on a 0.70 actuarial value, those between 100% and 150% FPL will pay cost sharing based on a 0.94 actuarial value and those with incomes between 150% and 250% FPL will pay cost sharing based on a 0.87 actuarial value.

The table shows that the subsidized premium and cost sharing still represent a significant percentage of these individuals' income. If the State is able to implement a BHP with no premium or cost sharing requirements, the financial burden on these low-income individuals will be reduced significantly.

Of particular interest in Table 6.1 is the cost sharing required for those under 100% FPL. According to Section 1402(c)(2) of the ACA, cost sharing subsidies are only available to those with incomes between 100% - 250% FPL. The recently released Notice of Benefit and Payment Parameters for 2014 appears to confirm that those below 100% FPL who are eligible for APTCs will not receive corresponding cost sharing subsidies. Specifically, the methodology outlined in the notice for developing cost sharing reduction estimates does not include estimates for those with incomes under 100% FPL. This apparent omission is perhaps an unintended consequence of the law and may support implementing a BHP if a large number of individuals are affected. Since these are individuals that are not Medicaid eligible, they will not, however, experience the anticipated high levels of churn discussed above.

Individuals with incomes that fluctuate above and below Medicaid eligibility levels also face financial risks that may deter them from enrolling in the Connector. These individuals would need to estimate their annual income each year to calculate APTCs for which they may be eligible if they purchase coverage in the Connector. At year end, a reconciliation based on actual income will occur. If their income was underestimated, they would have to pay back a portion of the excess tax credits advanced to them. <sup>51</sup> Due to this financial risk, low-income individuals may be hesitant to take advantage of these subsidies in the Connector once eligibility for Medicaid is lost, knowing they could owe money at the end of the year. With the implementation of a BHP, this risk is transferred to the State.

Individuals subject to churn may find that the administrative burden of enrolling in one program and then needing to enroll in another is cumbersome, and they may instead choose to drop out of coverage. If the State can create a product for this group that is both more affordable than coverage offered through the Connector and also has a seamless transition between Medicaid and a BHP, then these individuals may choose to remain covered, which may ultimately save the State money in terms of reduced charity care and social services.

The benefits enrollees in the Connector receive may only cover the minimum EHBs required by Qualified Health Plans (QHPs). Price competition among commercial carriers may result in few, if

<sup>&</sup>lt;sup>51</sup> 26 CFR Part 1.36B-4: The maximum repayment amount for a single filer is \$300 for those under 200% FPL, \$750 for those 200%-299% FPL and \$1,250 for those 300%-399% FPL.

any, benefits beyond EHBs as carriers attempt to develop low cost Silver plans in an effort to grab market share among subsidy eligible individuals. The Federal requirements define EHBs covered in the Connector as a floor; they are not a ceiling for benefits that must be offered through a BHP. Nothing prevents the State from offering more generous benefits, such as those offered through the Medicaid program, if they can be financed with the Federal dollars a BHP receives.

Another issue faced by individuals that churn is the ability to continue to see their current healthcare provider if those providers do not participate in plans offered through the Connector. Therefore as individuals "churn" in and out of Medicaid eligibility they may be forced to change carriers frequently. This frequent switching can create serious disruptions in care, and possibly lead to duplicative testing and other services if medical records and histories are not efficiently shared between the old and new provider. This could become even more complicated if the individual has children enrolled in CHIP, which would require them to navigate two different provider networks for the family. With a BHP that builds on the State's Medicaid infrastructure, many of the carriers that offer Medicaid managed care products may also participate in the BHP by offering managed care products with the same provider networks. This potential for network consistency may allow individuals with incomes that rise above the level for Medicaid eligibility to maintain coverage with the same provider under a BHP option. A BHP may not only provide adults with ability to maintain their current providers, but may also allow those with children enrolled in CHIP to utilize the same provider groups.

There is a risk, however, that if provider reimbursement rates for the BHP are close to those for Medicaid<sup>52</sup> physicians currently enrolled in the Medicaid program may not wish to take on new patients in the BHP program. This could lead to a shortfall of physicians available to service the BHP population. The State would need to discuss at length with current managed Medicaid plans the possibility of an insufficient number of providers willing to serve the BHP population with reimbursement rates at this level.

#### Churn at 200% FPL

The following figure demonstrates that with a BHP, churning would occur both between Medicaid and the BHP at 138% FPL and between the BHP and the Connector at 200% FPL. Implementing a BHP moves the crossover point into the Connector from 138% to 200% FPL. Depending upon the premium charged in the BHP, the cost sharing cliff that occurs as members churn out of BHP eligibility at 200% FPL could be significant. For example, if no premium or cost sharing are charged in the BHP, a larger financial "cliff" would be produced at 200% FPL as individuals with incomes that increase above this threshold would migrate from free healthcare benefits to paying \$194 per month, on average. This can cause significant financial strain on low-income individuals with little disposable income.

<sup>52</sup> Reimbursement levels in the Medicaid program are currently about 65% to 70% of Medicare.

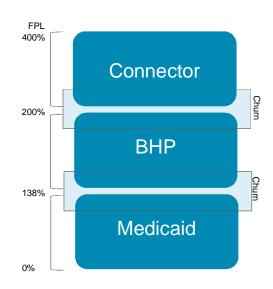


Figure 6.2: Churn at 138% and 200% FPL with a BHP

There is evidence to suggest that if a BHP is established, churn at 200% FPL between the BHP and the Connector would be similar to the churn found at 138% FPL. A study in the New England Journal of Medicine found that the level of churn at 200% FPL would be close to the level they estimated at 138% FPL if a BHP were integrated into Medicaid.<sup>53</sup>

A recent study published in *Health Affairs* estimated that a Basic Health Program could work to reduce the number of adults who would churn between Medicaid and coverage obtained through Exchanges. Without a Basic Health Program, it was estimated that 58.2% of people with incomes below 400% FPL would not experience an income-related eligibility change for a full year. By contrast, with a Basic Health Program, 62.5% of people would have stable income eligibility.<sup>54</sup> This equates to a 10% decrease in the number of people churning between Medicaid and Exchanges.

Another analysis by the Urban Institute estimated that a Basic Health Program jointly administered with Medicaid would essentially eliminate churning between Medicaid plans and Exchange plans for those below 200% FPL. While churning would still occur for those with incomes that rise above 200% FPL (these individuals would then have to purchase coverage through an Exchange), the number of those churning between Medicaid and Exchanges would decrease by 16%. 55

Churning can be administratively burdensome for the State, and it can be confusing for individuals as they move back and forth between coverage. Different eligibility criteria and enrollment processes can increase the complexity, and should be considered when designing a BHP.

<sup>&</sup>lt;sup>53</sup> John Graves, Ph.D, Rick Curtis, M.P.P, and Jonathan Gruber, Ph.D. "Balancing Coverage Affordability and Continuity under a Basic Health Program Option." New England Journal of Medicine, 265, No. 24 (2011).

<sup>&</sup>lt;sup>54</sup> Ann Hwang, Sara Rosenbaum, and Benjamin D. Sommers, "Creation of State Basic Health Programs Would Lead to 4 Percent Fewer People Churning between Medicaid and Exchanges." *Health Affairs* 31, no. 6 (2012): 1314-1320.

<sup>&</sup>lt;sup>55</sup> Matthew Buettgens, Austin Nichols, and Stan Dorn, "Churning under the ACA and State Policy Options for Mitigation." Urban Institute, June 2012.

## Impact on Medicaid and BHP Provider Availability and Access

Although the BHP may be a separate program from Medicaid, our modeling indicates that for the BHP to be financially feasible, reimbursement rates to providers would need to be near Medicaid levels. One consideration for policy makers and stakeholders contemplating the BHP is the potential impact of additional patients at or near Medicaid reimbursement levels on provider availability and access. The ACA creates a new standard for Medicaid which will allow states to extend coverage for childless adults and families below 138% FPL in 2014 with significant funding from the Federal government. Implementing a BHP would further increase the patient base served by Medicaid providers by approximately 25,000 additional individuals.

Accrediting agencies such as the National Committee for Quality Assurance (NCQA) and the Utilization Review Accreditation Commission (URAC) do not establish network adequacy standards, leaving these to be defined by the plans. Likewise, CMS does not establish network adequacy standards for Medicaid, leaving most managed care plans and State healthcare purchasers to develop them based on the unique circumstances, membership and geography of the population. For instance, there are often different standards for rural versus urban areas; or in the ratio of providers to enrollees for primary care versus specialty care services.

As policy makers consider provider reimbursement rates, it is important to understand implications they may have on the delivery system. On the one hand, increased reimbursement for BHP providers could help alleviate strain on the provider networks utilized by Medicaid and BHP. On the other, enhanced rates for BHP but not Medicaid could disadvantage Medicaid enrollees competing for limited provider services. Additional questions for consideration include:

- How would varied reimbursements between Medicaid and the BHP impact provider participation in the program(s)?
- How would varied reimbursements be administered, if the BHP were offered by the same managed care organizations (MCOs) that also serve Medicaid?
- Will MCOs be able to accurately communicate member information to providers as those members migrate to and from Medicaid and the BHP?

In 2006, Massachusetts sought to achieve near universal coverage for state residents and in 2007 implemented an "individual mandate," similar to the mandate called for under the ACA. Thus, the experience in Massachusetts provides a strong indication of the impact other states may need to plan for in the implementation of their Exchange programs. According to a paper published by The Kaiser Commission on Medicaid and the Uninsured, 56 there were three key lessons:

- Insurance expansions can lead to a surge in the demand for primary healthcare, especially in medically underserved low-income communities;
- In addition to expanding insurance coverage, investments to expand the capacity of the primary care system that will care for the newly insured, as well as, for those who remain uninsured will be important; and

<sup>&</sup>lt;sup>56</sup> Leighton Ku, PhD, MPH, et. al, "How Is the Primary Care Safety Net Faring in Massachusetts?", March 2009.http://www.kff.org/healthreform/upload/7878.pdf.

• Even post-reform, there will be a continuing need for sources of care for the uninsured.

Prior to reform, community health centers had already been providing care to one out of every 13 Massachusetts residents and one out of every four low-income residents, highlighting the importance of these safety net providers within the Massachusetts delivery system. When compared to private physicians, these health centers saw a larger share of low-income and uninsured patients. Such a disproportionate share of care for one segment of the population may indicate that private physicians were unwilling to treat low-income and uninsured patients.

Post reform, health centers found an overall increase in patient growth representing both insured and uninsured individuals, mainly in the adult age bands. Unexpectedly, many of the newly insured patients remained at the health centers, thus effectively changing the payer mix but not the patients served. This dynamic is now recognized as an important consequence of furnishing coverage for the uninsured. Most health insurance expansion is supported, in part, by the assumption that less money is needed for safety net providers. As the uninsured obtain coverage, they are expected to have access to care through private physician offices and should therefore be less reliant on the safety net.

A thorough analysis of the Hawai'i Medicaid provider infrastructure should be undertaken to assess the impact of expanding the Medicaid eligible population, as well as the additional impact of potentially adding the BHP population to this patient base.

## Impact on the Low-income Population

< 138% FPL

Starting in 2014, major provisions of the ACA will be implemented, and as previously discussed, health insurance will become more affordable for low-income residents, many of whom are uninsured today. The availability of subsidized premiums and cost sharing are the primary drivers of this anticipated change. Table 6.2 summarizes the segments of the population (by FPL) that will be impacted by these changes, both with and without a BHP.

**Adult Citizens and Adult Residents** Residents who who do not meet Income as a meet Medicaid Medicaid % of FPL Children Requirements Requirements WITHOUT BHP > 400% FPL No Subsidies 200 - 400% FPL CHIP Exchange Subsidies 138% - 200% FPL **CHIP Exchange Subsidies** < 138% FPL Medicaid Exchange Subsidies **WITH BHP** > 400% FPL No Subsidies 200 - 400% FPL CHIP Exchange Subsidies 138% - 200% FPL CHIP BHP BHP

Medicaid

Table 6.2: Coverage Eligibility in 2014

BHP

It is possible that coverage could become even more affordable to a segment of the low-income population if a BHP were implemented. While the presence of premium and cost sharing subsidies in the Connector will make coverage much more affordable than it is today for those with incomes between 138% and 200% FPL, the amount that these individuals are still responsible for can represent a significant portion of their income in some cases. The subsidized premiums are a fixed percentage of income ranging from 2% to 6.3% for the under 200% FPL population. The out-of-pocket cost sharing they are responsible for will still represent 6-13% of the medical claims incurred, on average.<sup>57</sup>

The following tables present the estimated average monthly cost a 40-year old non-smoker would have to pay for subsidized premium and cost sharing in the Connector, at various income levels, over the period 2014 through 2018. The premiums were calculated as the applicable percent of income as outlined in the ACA; cost sharing amounts are based on microsimulation modeling performed to estimate average claims costs for a 40-year old with average morbidity in the individual market with reduced cost sharing requirements for the applicable income level. The first table presents the information on a cost per member per month basis and the second presents these costs as a percent of income.

Table 6.3: Subsidized Premium and Cost Sharing in the Connector 2014-2018

Income as a % of FPL	2014	2015	2016	2017	2018
70%	\$127	\$136	\$141	\$150	\$161
100%	\$47	\$50	\$51	\$54	\$57
138%	\$75	\$78	\$81	\$84	\$87
144%	\$83	\$87	\$89	\$93	\$96
150%	\$121	\$126	\$130	\$136	\$143
175%	\$154	\$160	\$165	\$172	\$179
200%	\$194	\$201	\$207	\$215	\$222

Table 6.4: Subsidized Premium and Cost Sharing as a % of Income 2014-2018

Income as a % of FPL	2014	2015	2016	2017	2018
70%	16.3%	17.1%	17.4%	17.9%	19.0%
100%	4.2%	4.4%	4.4%	4.5%	4.7%
138%	4.9%	5.0%	5.0%	5.1%	5.2%
144%	5.2%	5.3%	5.3%	5.4%	5.5%
150%	7.2%	7.4%	7.5%	7.6%	7.9%
175%	7.9%	8.1%	8.1%	8.2%	8.5%
200%	8.7%	8.9%	8.9%	9.0%	9.2%

<sup>&</sup>lt;sup>57</sup>Costs for those with incomes below 100% are greater than those at 100% FPL based on previously stated current interpretations that individuals below 100% FPL are not eligible for cost sharing subsidies.

Costs as a percent of premium for these low-income individuals increase as a percent of income over time due to both increases in the required premium and increases in cost sharing. Through 2018, the percentage of income that will be required to be paid as subsidized premiums will be adjusted each year to reflect the excess of the rate of premium growth for the preceding calendar year over the rate of income growth for the preceding calendar year. Because private health insurance premiums generally grow faster than income, this indexing provision will keep the share of the premium paid by an enrollee and the government roughly constant from year to year. Beginning in 2019, the maximum percentages of income that enrollees will have to pay will continue to increase through this regular indexing formula but may increase further to reflect the excess of the rate of premium growth over the rate of growth in the consumer price index.<sup>58</sup> Subsidized cost sharing requirements will remain the same percentage of claims; however, these cost sharing requirements will grow as a percentage of income because the rate of private healthcare costs generally grow at a rate faster than income.

The ability of the State to provide coverage through a BHP to those with incomes between 138% - 200% FPL at a level even more affordable than would be available to them through the Connector will depend upon the relationship between the revenues the State receives from the Federal government and the cost of the benefits provided. If Federal funding is enough to cover most if not all of the costs, premiums that would need to be charged to the BHP population could potentially be lower than those in the Connector, or even zero. This lower potential cost to this low-income population could work to hold the uninsured rate down.

Potential Advantages and Disadvantages to Low-income Residents
A BHP could provide several advantages from the low-income residents' perspective but at the same time has some disadvantages. A summary of these include but are not limited to the following:

#### Potential Advantages

- Those who lose Medicaid eligibility may be able to retain coverage at levels similar to their current Medicaid coverage, perhaps receiving greater benefits than they would through the Connector;
- Low-income adults that maintain incomes >138% FPL would be able to receive coverage at more affordable rates than will be available to them through the Connector;
- Those enrolling in a BHP that experience a change in income status during the year do not run the risk of owing money to the IRS at year end;
- Maintenance of coverage may be more stable, particularly if the State can provide a smooth transition between Medicaid and the BHP; and
- BHP enrollees may have more access to safety net providers.

#### Potential Disadvantages

- Provider networks may be more limited than those that could be accessed through the commercial market;
- BHP eligible individuals would not have access to the commercial market at subsidized rates; and
- A separate system of care may be developed for low-income residents.

<sup>&</sup>lt;sup>58</sup> Section 1401 of the ACA.

One way to address most of the disadvantages listed above is to design the BHP as a two-way bridge where BHP consumers can select between Medicaid or the Connector. This would create more consumer choice and allow individuals that move between Medicaid and the BHP to retain Medicaid benefits or select coverage through the Connector and gain access to commercial provider networks. Likewise those with incomes that fall below 200% FPL could elect to maintain their current coverage through the Connector or opt to elect Medicaid benefits and provider networks. The disadvantages of this option are that it can cause confusion among consumers, lead to potential risk selection, and from the State's perspective result in a financial shortfall as the BHP revenues it receives would represent only 95% of the payments required to be made to plans in the Exchange.

## Impact on the Uninsured Rate

In performing our microsimulation modeling to determine the migration that will occur among various insurance statuses, we captured the anticipated change in the uninsured rate, both with and without a BHP. The table below shows that if a BHP is implemented, the uninsured rate is estimated to be slightly lower than if a BHP were not implemented. One driver of the relatively small difference in these two scenarios is in part due to Hawai'i's already low uninsured rate relative to that observed nationwide.

	Without	With
Year	ВНР	BHP
Current	7.8%	7.8%
2014	3.2%	2.9%
2015	2.7%	2.5%
2016	2.4%	2.3%
2017	2.4%	2.3%
2018	2.3%	2.2%

Table 6.5: Uninsured Rates With and Without a BHP

## Impact on the State

Policy makers and stakeholders also must consider what state entity will be responsible for the design, implementation and operation of the BHP. Many studies assume that the BHP will be operated by the State agency responsible for administering Medicaid. This reasoning is driven by the fact that the populations are similar enough to leverage existing processes and policies for benefit administration. In fact, many States, including Hawai'i have implemented Medicaid expansion programs designed to provide some level of coverage to single adults and childless adults between the State's Medicaid FPL and 200% of the FPL.

Although other entities such as the Connector could administer the BHP, the financial feasibility is dependent on providers serving BHP clients at fee structures near Medicaid levels. If other entities were to administer the BHP they would likely have to contract with Medicaid health plans in order to access reimbursement rates at this level. Additional considerations include:

 Do the current Medicaid managed care plans have experience with expansion coverage in other State Medicaid programs?

- Is the BHP best served through the existing structure, oversight and management of a Medicaid agency more familiar with BHP like populations?
- Which agency is the best able to manage the health plans through enforcement of contractual terms, data collection, policies and annual rate determinations?
- How would the State's cost of administering the BHP be funded?

#### State Administrative Issues

As discussed above, Federal funds received for the BHP program may only be used to lower premiums, reduce cost sharing, or increase benefits.<sup>59</sup> Therefore, it appears states may not use a portion of these funds to cover the cost of administrative expenses associated with running the program. If administration cannot be funded by the excess premium subsidies, administrative costs would need to be covered by other sources, such as the State's general fund or other assessments.

As a result, if Hawai'i were to implement a BHP, it might make sense to explore the possibility of building upon DHS' MedQuest program, the State's current Medicaid managed care program. In addition to increasing the chances of creating continuity of care for members that churn between the Medicaid and BHP programs, some economies of scope may be created through leveraging of existing enrollment systems and potentially a single negotiation process with managed care plans offering coverage through both programs.

However, building on the MedQuest program would likely mean DHS would need additional administrative resources. Not only would DHS need to be able to serve more people and oversee the quality of care in the program, they would also be required to take on additional new functions. For example, if a premium were charged to BHP members, DHS would need to have systems in place to bill and collect these premiums. In addition, call center functions would likely need to be expanded and systems would likely need to be revised to handle new eligibility requirements.

The ACA also requires Federal oversight of a BHP program. Each year the Secretary of HHS will conduct a review of the program to ensure compliance, including a review of:

- Eligibility verification requirements for participation in the program;
- Requirements for use of Federal funds received by the program; and
- Quality and performance standards.

The State would likely need to meet various reporting requirements to aid in the Secretary's review, and it is unknown what types of policy decisions the Federal government could be making for Hawai'i though these oversight powers.

With the Connector serving as a single point of entry into various subsidized programs, many of the functions performed by the Connector may also apply to the BHP. For example, the Connector will receive and process applications, some of which will result in the individual being eligible for and enrolling in the BHP. The Connector could also take on other tasks such as consumer education

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<sup>&</sup>lt;sup>59</sup> Section 1331(d) of the ACA.

related to plan choice. A portion of the cost associated with these tasks, however, may be allocated to the BHP.

Finally, the State would be required to operate a separate trust fund into which Federal payments for the program are received. However, in the absence of BHP regulations, it is difficult to know exactly what the State's responsibilities would be at this time, and what funds could be used to cover their cost.

## Additional Risks to the State

It is critical that States accurately estimate the amount of Federal funding they will receive and the cost of implementing a BHP program. Our sensitivity analysis indicates there are significant risks for the program to run at a deficit if careful planning is not undertaken. In addition to needing regulations to provide clarification as to funding, risk adjustment and year end reconciliation processes, the State is also exposed to potential reductions in funding due to the following:

- If commercial carriers are successful at managing costs in the individual market it will result in decreased revenues to the State for the BHP program
- If the Connector is successful at containing costs and promoting competition that drives lower rates it will result in decreased revenue to the State for the BHP program

## Potential Impact on the Hawai'i Connector

Any assessment in evaluating a BHP must consider the impact that it will have on the Connector. Having a robust and competitive market will provide the Connector with more leverage to promote innovative coverage designs that improve quality and lower cost. The effectiveness of the Connector at driving this change will depend in large part on its size. The impact of reduced enrollment due to the introduction of a BHP will depend in part on how many people remain eligible to enroll through the Connector. Given that the ACA states those eligible for the BHP would not be eligible premium and cost sharing subsidies, establishing a BHP would decrease the number of individuals purchasing coverage through the Connector. This in turn would reduce the size of the Connector and impact the risk profile of those purchasing coverage through the individual market, potentially reducing the ability to spread risk adequately and avoid adverse selection. The Connector's sustainability as well as its leverage and ability to secure low cost coverage for residents while driving quality and efficiency in the State's healthcare delivery system would also likely be impacted.

Our microsimulation modeling found that with a BHP the number of subsidy eligible individuals enrolled in the Connector in 2014 would be roughly half the number if a BHP were not established, decreasing from 51,000 to 26,000. <sup>60</sup> This does not mean total enrollment in the Connector would be reduced to half as there would be other non-subsidy eligible individuals and small groups that would also be enrolled in either scenario. The following tables show the number of individuals projected to be covered in each market segment who are eligible to enroll in the Connector, both with and without a BHP. The two far right columns show the enrollment in the Connector under both a low

<sup>&</sup>lt;sup>60</sup> This result is consistent with analysis performed by the Kaiser Family Foundation which estimates that roughly half of those eligible for premium and cost sharing subsidies nationwide are below 200% FPL. <a href="http://www.kff.org/healthreform/upload/8283.pdf">http://www.kff.org/healthreform/upload/8283.pdf</a> p.9.

and high take-up scenario. The low take-up scenario assumes 25% of non-subsidy eligible individuals and small groups take-up coverage through the Connector, and in the high take-up scenario, 50% do so.

Table 6.6: 2014 Connector Enrollment Without a BHP

Market	Total Individuals Covered	Enrolled in Connector – Low Take-up	Enrolled in Connector – High Take-up
Individual – Subsidy Eligible	51,000	51,000	51,000
Individual – Non-Subsidy Eligible	48,000	12,000	24,000
Small Group	207,000	52,000	104,000
Total	306,000	115,000	179,000

Table 6.7: 2014 Connector Enrollment With a BHP

Market	Total Individuals Covered	Enrolled in Connector – Low Estimate	Enrolled in Connector – High Estimate
Individual – Subsidy Eligible	26,000	26,000	26,000
Individual – Non-Subsidy Eligible	53,000	13,000	26,000
Small Group	207,000	52,000	104,000
Total	286,000	91,000	156,000

While our economic and actuarially based HRM model is well suited for projecting premiums, claims and coverage take-up, it is not designed to model decisions which are non-financial in nature. Given premiums for comparable coverage must be the same inside and outside of the Connector, the decision to take coverage through the Connector or obtain coverage in the outside market is not a financial one for those ineligible for subsidies. Other non- price considerations in making this decision include but are not limited to product offerings inside vs. outside the Connector, carriers that participate inside vs. outside the Connector, the ability to access an agent's services inside vs. outside the Connector, and other value added benefits that may be offered through the Connector. Therefore, we present the high and low take-up scenarios above as a reasonable range of potential enrollment. For more information on the basis for the low and high take-up assumptions, please see the companion report *Impact of the Affordable Care Act on the Hawai'i Marketplace*.

The reader will note that the number of non-subsidy eligible residents taking up coverage in the individual market is higher when a BHP is present (i.e., 53,000, vs. 48,000) than when a BHP is not present. Our microsimulation modeling found that the population eligible for the BHP, after controlling for differences in age, is anticipated to be in poorer health than members that would remain in the individual market. This in turn would lead to rates in the Connector that are approximately 8% lower if a BHP were established than if it were not.

A decline in enrollment in the Connector of about 23,000 due to the presence of a BHP could also create additional financial burden on the Connector as fixed costs would need to be spread over a

smaller population. This projected decrease in enrollment represents about a 20% decrease in the low take-up scenario and a 13% decrease in the high take-up scenario. The impact could be a significant issue because the ACA requires Exchanges to be financially self-sustaining by 2015.

Provider reimbursements could also be impacted by the introduction of a BHP. Medicaid reimburses providers at rates significantly below those in the commercial markets. As a result, higher reimbursement rates are typically demanded by providers from other markets to subsidize these lower reimbursement rates attached to government programs. If the BHP is successful in contracting at rates closer to Medicaid, the rate of subsidization needed from the commercial markets will increase, leading to upward pressure on rates in the individual and small group plans offered through the Connector, as well as products offered outside of the Connector.

A smaller population eligible to purchase coverage may also impact carriers' decisions as to whether or not to participate in the Connector. Carriers will be required to meet additional requirements in order to become certified as a Qualified Health Plan issuer approved to sell coverage through the Connector. Examples include meeting service area requirements that cover at a minimum an entire county, designing variations of each Silver level plan for cost sharing eligible individuals, meeting quality and accreditation requirements, and including essential community providers in their network. If carriers do not feel the potential for enrollment is worth the additional burden in meeting these requirements, they may decide only to offer coverage outside of the Connector.

A number of different strategies could be considered for minimizing the impact that a BHP would have on the viability of the Connector. The State could consider integrating the procurement strategy used for the BHP with that of the Connector, <sup>61</sup> and potentially Medicaid, CHIP or the State employee benefit program. This pooling of programs for negotiation purposes could produce leverage and potentially attract carriers that offer products across all types of coverage.

As another strategy the State could consider integrating the BHP administrative functions with those of the Connector. The Connector must create complex administrative systems for validating eligibility, calculating premium subsidies, enrolling individuals in coverage, premium billing and more. Drawing people away from the Connector when a BHP is present will reduce the financing base for the Connector if assessments to cover its operating costs are applied only to products sold through it. Integrating the BHP functions with those of the Connector may not only create efficiencies but allow the Connector to spread its fixed costs over relatively the same size population that it would be able in the absence of a BHP.

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<sup>&</sup>lt;sup>61</sup> This assumes the State takes an active purchasing role in selecting qualified health plans to be offered through the Connector.

## Conclusion

The ACA will make available affordable health insurance coverage opportunities for individuals with incomes below 400% FPL which are greatly expanded through various Federal funding. The BHP option could help achieve this goal more effectively by further lowering costs for certain low-income adults by building on current Medicaid programs. The precise benefits and risks will depend upon the State's characteristics and policy choices. In evaluating whether to pursue the BHP option in Hawai'i, it is critical for State decision makers to understand and weigh the various elements of the program and evaluate how these are likely to be impacted by the unique circumstances of the State.

There are several choices to be made by the State in designing a BHP. These include whether to build the program off of existing public programs or take more of a commercial design. Premium and cost sharing requirements should be designed with consideration given to both affordability and mitigation of adverse selection. Decisions about premium, cost sharing and provider reimbursement levels will impact the financial feasibility of the BHP.

Several states have studied the feasibility of a BHP, however only a few have made a strong move in the direction of establishing one. Washington, for example, already operates a program of this type and passed a bill to ensure that its model complied with the terms of the ACA. Massachusetts passed legislation establishing a BHP but is awaiting Federal regulations. <sup>62</sup> California introduced a bill on December 3, 2012 to establish a BHP. <sup>63</sup> Other states that have studied or passed legislation to study the option include, but may not be limited to, Connecticut, District of Columbia, Illinois, Maine, Maryland, Michigan, New Jersey, New York, Rhode Island, Utah, and Vermont.

The results of our financial feasibility analysis indicate that the BHP could potentially be a viable option for Hawai'i in the future. Federal regulations have not yet been released. The uncertainty around them to provide more details related to the operation and financing of a BHP program and other areas of uncertainty create several risks that the State must consider if it decides to move forward with implementing a BHP at this time. These include but are not limited to:

- Lack of clarification as to whether the State would receive 95% or 100% of the cost sharing subsidies;
- Uncertainty as to whether the State would receive a cost sharing subsidy for those under 100% FPL;
- Lack of information as to how the financial reconciliation process will work for those whose income for the year retrospectively impacts the level of premium and cost sharing subsidies they are eligible for;

<sup>&</sup>lt;sup>62</sup> Part I, Title XVII, Chapter 118E.

<sup>&</sup>lt;sup>63</sup> Senate Bill 20.

- How payments to the State will be adjusted for the morbidity and experience of the BHP population, including year-end risk adjustment and reinsurance payments;
- Whether plans can offer benefits with 80% and 90% actuarial values or whether they will be required to offer coverage at the higher 87% and 94% levels BHP eligible individuals would receive in the Connector;
- How to demonstrate that the minimum 85% loss ratio is met; and
- Whether the risk pools of the BHP and the individual commercial risk pool can be combined.

There are many uncertainties listed above and the potential risk the State could be taking, it may wish to delay implementation of a BHP at this time and consider further analysis once regulations have been issued by the Federal government that will provide answers to these questions. If the State were to delay implementation, it would have the opportunity to examine early actual experience and enrollment in the Connector once they become known (e.g., details such as the number of individuals between 138% - 200% FPL that enroll and their corresponding morbidity).

## Advantages and Disadvantages

There are many potential advantages and disadvantages of a both implementing a BHP. For convenience, we summarize those advantages and disadvantages here. Please note that the list below is not intended to be all inclusive but rather represents key items that may impact the State's decision.

### Advantages

- Coverage may be able to be provided to this low-income population through a BHP with benefits greater than those provided and/or premiums and cost sharing requirements lower than those required through the Connector;
- Low-income residents with income that fluctuates would not run the risk of owing money to the Federal government at the end of the year if APTCs paid by the Federal government are over estimated throughout the year;
- Implementing the BHP as a Medicaid-like program improves affordability and coverage continuity for low-income residents and may decrease the uninsured rate;
- Administering the program as an adult CHIP program could provide the structure for replacement of CHIP coverage if Federal funding is not extended beyond 2015;
- The State has the flexibility to tailor the benefit plan of the BHP to meet the needs of the BHP population, something that would likely not occur in the Connector;
- Families with incomes between 138%-200% FPL may have children enrolled in the CHIP program and the BHP could be designed so that the parents and children could have the same benefits and provider network;
- As incomes rise above Medicaid eligibility levels, individuals may be able to keep their same providers in the BHP which will improve continuity of care and may reduce duplication of medical services that could occur when individuals change providers;
- Premiums in the individual market will be lower if a BHP is implemented as BHP eligible individuals with higher morbidity are removed from the risk pool; and

 Managed care organizations previously not interested in offering coverage through the Medicaid program may become interested in both Medicaid and the BHP in light of a decreased size of the individual market.

#### Disadvantages

- Implementing a BHP would require the State to take on additional financial risk it otherwise would not be required to;
- The State is at financial risk if Federal payments decrease over time as a result of either commercial carriers or the Connector being successful at holding down premiums in the individual market, as this translates into lower funding for the BHP;
- It is unclear whether any funds will be provided to the State for establishment of the BHP and if none are, the State would need to cover these costs;
- Funds received from the Federal government for BHP enrollees may not be used to cover costs associated with ongoing administration of a BHP;
- Administering the BHP as a Medicaid-like program would likely create additional administrative burden on the MedQuest program;
- If the BHP is designed as a Medicaid-like program, it may be difficult to reduce benefits in the future if maintenance of effort requirements imposed on Medicaid programs are extended to BHP programs of this type;
- Individuals may have less provider choice in a BHP if it is structured as a Medicaid-like program;
- Enrollment in the Connector will be lower with a BHP than without, and the financial viability
  of the Connector could be impacted as fixed costs would need to be spread over a smaller
  population;
- Smaller enrollment in the Connector could decrease its leverage to improve quality, lower premiums, and achieve other goals such as reforming delivery of healthcare and holding insurers accountable:
- The State is at financial risk for reduced revenue that may arise from year-end reconciliations, the details of which are still unknown;
- Fewer individuals enrolled in the Connector may result in some carriers deciding not to participate;
- If commercial carriers manage costs in the individual market it will result in decrease revenue to the State for the BHP program; and
- If the Connector is successful in containing costs and promoting competition that drives lower rates it will result in decreased revenue to the State for the BHP program.

## Comparison with Other Prior Research

Since the passage of the ACA, a series of policy reports and state specific analyses have provided important insight to state policy makers as they consider whether and how to implement a BHP. This section summarizes several of these existing national and state analyses in an effort to inform Hawai'i policy makers and stakeholders as they explore the BHP option in their state.

Some states have documented additional cost savings based on the assumption that populations currently receiving coverage through programs funded in whole, or in part with state funds could be transitioned into the fully Federally funded BHP. The basic eligibility criteria for BHP are clear. Most BHP analyses focus on the core BHP population, (the uninsured from 138 – 200% FPL). However, some have noted that populations currently enrolled in state funded expansion and waiver programs with incomes above current Medicaid levels are likely to transition into BHP programs. To the extent those populations leave state funded programs for the fully Federally funded BHP, states will experience savings. For Hawai'i, this would include individuals previously covered by the QuestNET and QuestACE programs, and the COFA population under 200% FPL (if is it ultimately determined that they are eligible for the BHP).

An often cited potential benefit of the BHP option is the opportunity to improve affordability for the population between 138% - 200% FPL. While some BHP state analyses have modeled the maximum enrollee cost sharing levels when determining the financial viability of the BHP, most states either assume lower than the required cost sharing levels in their modeling or suggest that reducing enrollee cost sharing could be a priority for states in allocating any surplus of Federal BHP funding. In addition, there is consensus that implementing a BHP is likely to reduce the number of uninsured and improve take-up of health coverage as a result of offering coverage at a rate lower than subsided premiums that will be offered through the Exchanges.

Significant consensus has emerged about what program designs are most likely to yield successful BHP programs. Perhaps the most fundamental question for states is whether a BHP would be built on the framework of existing public insurance health plans and provider networks, or whether the BHP would look more like a commercial health plan product. While continuity concerns might point toward participating plans and providers that are aligned across Medicaid, BHP, and the Connector to the greatest extent possible, it is clear that to be financially viable, BHP coverage would need to utilize lower cost plans and lower provider reimbursement levels than would be available through the Exchanges. States with a robust network of Medicaid plans or plans that provide both public and private coverage are well positioned to leverage these plans and their participating providers in implementing a BHP.

Virtually all studies recognize that the implementation of a BHP would reduce the size of a state's Exchange and many discuss the implications of possible changes in the Exchange risk profile on premiums. While analysts have suggested that a smaller Exchange might have less purchasing power or attract fewer insurers, there is disagreement about the level below which the Exchange is likely to suffer from these effects. Strategies have been suggested to help remedy these effects, such as integrating a BHP within the Exchange to maintain administrative scale and leverage with carriers.

While most studies assume that creating a BHP will have an effect on the risk of the Exchange population, there are differences of opinion as to what that effect will be. Some assume that BHP populations represent a healthier risk because anticipated enrollees tend to be younger. Others believe that BHP populations are higher risk because they are lower income.

## **APPENDIX A**

## Healthcare Reform Microsimulation Modeling

The Oliver Wyman Healthcare Reform Microsimulation Model (HRMM) was used to assess potential premiums and enrollment in a Hawai'i run Exchange (i.e., the Connector) under various scenarios. This model is a leading edge tool for analyzing the impact of various healthcare reform provisions, as well as proposed legislation. Economic modeling that captures the flow of individuals across various markets based on their economic purchasing decisions is integrated with actuarial modeling designed to assess the impact that the various aspects of the ACA have on insurance markets and premiums. It is this rare integration of economic and actuarial modeling that allows us to capture the complex migration likely to occur as a result of the ACA.

The model has three primary modules. The first module characterizes the current population; the second module calibrates the simulated population to the current market; and the third module projects the simulated population in future years given coverage options, choice and market reforms.

In the first module, the current population was built from several data sources. The American Community Survey (ACS) is selected as the primary data source which covers the entire population. The ACS includes information for each person's age, gender, income, insurance coverage type, employment status, geographic place of work, geographic place of residence, industry in which they are employed, and many other characteristics. The ACS requests information on households, however our model is built on decisions made at the Health Insurance Unit (HIU) level. An HIU is defined as any grouping of family members where each person within the HIU might be eligible for coverage under the same policy. Therefore, when preparing the ACS data for our model, it is adjusted to reflect HIUs.

The ACS data were supplemented and synthesized with several other data sources in order to produce the current marketplace. Information from Dun and Bradstreet was used to create the current Hawai'i employer market. Synthetic groups were created by assigning working individuals from the ACS data to the Dun and Bradstreet employers. Individuals are strategically placed into groups based on their occupation. Information from the Insurer/Employer component of the Medical Expenditure Panel Survey (MEPS) is used to simulate which groups offer insurance coverage and which employees within those groups are covered. The blended results from the 2010 and 2011 MEPS insurance/employer component data were used to establish rates at which coverage was offered in the State at various group sizes. Membership reports from MedQuest were used to size the current Medicaid population and CMS reporting was used to size the Medicare population.

A set of synthetic rating manuals are used to reproduce current premiums and benefit coverage distributions for each carrier by market. These manuals were created using information from statutory financial statements, information obtained from carrier data calls, and other available reports. Finally, health status is strategically assigned to various sub-populations based on statistical analysis of self-reported health status obtained from the Current Population Survey (CPS).

Once the current market has been created, it was used to calibrate the HRMM. The purpose of the calibration module is to solve for the model parameters that replicate the characteristics (e.g., size, premium, claims cost) of the known insurance markets during the base period. The model is calibrated to ensure the known market is replicated at several levels, such as by broad age and income ranges within various markets. This step is critical to the modeling as without such calibration reliability of the results is diminished significantly. The following table compares a distribution of the known population by market segment with the distribution produced by the calibrated model. As you can see, the calibrated model was able to replicate the known purchasing preferences in key market segments of interest in Hawai'i quite well.

	Known Distribution	Modeled Distribution
Uninsured	12.7%	10.8%
Individual	15.8%	16.4%
Small Group	51.1%	51.9%
Mid-Group	<u>20.4</u> %	<u>20.8</u> %
	100.0%	100.0%
Uninsured – < 150% FPL Uninsured – 150-400% FPL Uninsured – < 400+% FPL	0.0% 7.5% <u>5.2</u> % 12.7%	0.0% 7.1% <u>3.8</u> % 10.8%
Uninsured – Age < 30 Uninsured – Age 30-49 Uninsured – Age 50+	2.0% 6.3% <u>4.4</u> % 12.7%	2.2% 5.8% <u>2.9</u> % 10.8%

Once the model has been calibrated, the model is ready to be used to project the markets into which individuals will enroll based on the coverage options available to them, and the resulting premiums for those markets. The process of determining which coverage option each HIU elects to enroll in was based on the application of economic utility maximization. Employer decisions as to the level of coverage offered, if any, were based on an elasticity curve. The response from employers to changes in premiums and other financial incentives is a critical element of the model. It was particularly important to consider the impact of the Hawai'i Prepaid Health Care Act on these decisions.

The model incorporates the various aspects of the ACA and other economic assumptions that will impact premiums and enrollment. These items include but are not limited to:

- Premium and cost sharing subsidies available to low-income individuals;
- Individual coverage mandate and penalties for not taking coverage (unless exempt);
- Medicaid eligibility rules that include coverage for childless adults up to 133% of the Federal poverty level (138% when including a 5% income disregard);
- Application of an affordability test to determine whether individuals offered employer coverage are eligible for subsidized coverage in the individual Exchange;

- Changes in Federal poverty levels in future years;
- Regional population growth estimates consistent with the US Bureau of the Census projections;
- Medical inflation;
- Consumer Price Index (CPI) growth consistent with the Social Security Trustees Report;
- Wage inflation consistent with the Social Security Trustees Report;
- Income tax rates specific to each state including state, Federal, FICA, and Medicare taxes;
- Pent up demand for newly insured individuals;
- Differences in utilization between individuals with insurance and similarly situated individuals without insurance, based on a study by the Congressional Budget Office; and
- An inertia factor to model the likelihood of an individual switching to alternate coverage.

The modeling results include premium, claims and enrollment by market and projection year. The model is driven based on several input assumptions and as a result has the flexibility and power to help answer many policy related questions. Some of the question the model has been used to answer in previous assignments include but are not limited to:

- What is the size of the individual, small group, Medicaid and uninsured populations pre- and post-reform? Where do the shifts in enrollment occur?
- What are the premiums in the individual and small group markets pre- and post reform?
- What is the impact on premiums and enrollment if the individual and small group markets are merged?
- What is the impact on premiums and enrollment in the small group market if the definition of small group is expanded to 100?
- What is the impact on the size of the Connector and premiums in the individual market if a BHP is established? How many individuals would enroll in the BHP and what is the income and morbidity distribution of that population?
- What is the impact on premiums from changes in morbidity of the pool, and from other effects such as essential health benefits, taxes, fees, and reinsurance?
- What is the income distribution within a given market before and after 2014?
- What do the uninsured look like before and after 2014 by age, income?

## **APPENDIX B**

## **BHP Model Characteristics**

Each assumption is a function of the age (a), income (i), and prior coverage status(c) for a given enrollee.

## Total Funding (TF) for a given year is expressed by the following equation:

$$TF = \sum E_{(a, i, c)} \times (PS_{(a, i, c)} + CS_{(a, i, c)} + MP_{(a, i, c)})$$

Where:

 $E_{(a, i, c)} = Enrollment$  (from the Microsimulation)

 $PS_{(a,i)} = Federal Premium Subsidy = (Silver Premium_{(a)} - Member Premium_{(i)}) \times 0.95$ 

 $CS_{(a, i)} = Cost Sharing Subsidy^{64} = Silver Premium_{(a)} \times 0.80 / 0.70 \times (0.87 - 0.70) \times 0.95$  (this equation is appropriate for those with income between 150% and 200% of FPL; for lower incomes

equation is appropriate for those with income between 150% and 200% of FPL; for lower incomes the cost sharing percentage changes from 0.87 to 0.94)

 $MP_{(a, j)} = Member Premium_{(j)}$ 

## Total Claims (TC) for a given year are expressed by the following equation:

$$TC = \sum E_{(a, i, c)} x (NC_{(a)} x NCAC x NCAP x PD_{(c)} x BA_{(i)} x MB_{(i)} x T)$$

Where:

 $E_{(a, i, c)}$  = Enrollment (from the Microsimulation)

 $NC_{(a)}$  = Net Commercial Claims adjusted by age to match the Silver Premium

NCAC = Net Claims Adjustment for Silver Cost Sharing = 1 / 0.7

NCAP = Net Claims Adjustment for Provider Reimbursement = 0.48

 $PD_{(c)}$  = Pent-up Demand = 1.1 for enrollees without coverage in the prior year

BA<sub>(i)</sub> = Utilization Adjustment<sub>(i)</sub> x Cost Sharing Adjustment<sub>(i)</sub>

 $MB_{(i)} = Morbidity Adjustment_{(i)}$ 

T = Trend = 5% per year

Finally, we assume that any carriers participating in the BHP would require 15% for administrative costs and profit. So, we can express the program deficit or surplus (PDS) with the following equation:

$$PDS = TF - TC / (1 - 0.15)$$

<sup>&</sup>lt;sup>64</sup> [Second Lowest Cost Silver Premium] x [Expected Pricing Loss Ratio] / [Transitional Reinsurance Credit] / [Silver Plan Actuarial Value] x [Actuarial Value for Subsidized Silver Level Plan – Actuarial Value for Silver Level Plan] x 0.95.

# **APPENDIX C**

# **BHP Model Output**

BHP Option - Bas	seline Sc	enario		Revenue PMPM												Gain/(Loss)				
	Α	В	С		D		E		F		1		J		К		L	-	M	
			2nd										EHB		ЕНВ					
			owest			Pre	emium				Total	=	Benefit		Benefit		ЕНВ			
			Cost				Subsidy		% Cost		ВНР	Estimated			ВНР		enefit	El	HB Benefit	
	Member		ilver	Me			5% x		naring		ubsidy	Claims		F	Premium	РМРМ			otal Dollars	
<b>BHP Eligible Cohort</b>	Months	Enrollment	emium		mium		C-D)		ubsidy		E+F		Cost	J	/(1-15%)		I-K		AxL	
<100% FPL																				
2014	39,180	3,265	\$ 278	\$	16	\$	249	\$	-	\$	249	\$	274	\$	322	\$	(73)	\$	(2,860,091)	
2015	42,229	3,519	\$ 301	\$	16	\$	271	\$	-	\$	271	\$	275	\$	323	\$	(52)	\$	(2,201,616)	
2016	42,349	3,529	\$ 321	\$	16	\$	289	\$	-	\$	289	\$	289	\$	340	\$	(50)	\$	(2,135,682)	
2017	42,472	3,539	\$ 356	\$	17	\$	322	\$	-	\$	322	\$	303	\$	357	\$	(34)	\$	(1,459,106)	
2018	34,629	2,886	\$ 386	\$	17	\$	351	\$	-	\$	351	\$	314	\$	370	\$	(19)	\$	(648,924)	
Total	200,860	3,348	\$ 327	\$	16	\$	295	\$	-	\$	295	\$	290	\$	342	\$	(46)	\$	(9,305,420)	
100-138% FPL																				
2014	15,172	1,264	\$ 257	\$	33	\$	213	\$	74	\$	288	\$	229	\$	269	\$	18	\$	276,590	
2015	18,726	1,560	\$ 277	\$	34	\$	231	\$	77	\$	308	\$	211	\$	248	\$	60	\$	1,129,359	
2016	18,947	1,579	\$ 295	\$	35	\$	247	\$	80	\$	328	\$	216	\$	255	\$	73	\$	1,382,734	
2017	15,458	1,288	\$ 333	\$	35	\$	282	\$	87	\$	369	\$	197	\$	232	\$	137	\$	2,121,380	
2018	23,604	1,967	\$ 369	\$	36	\$	316	\$	96	\$	412	\$	255	\$	299	\$	113	\$	2,655,562	
Total	91,907	1,532	\$ 310	\$	35	\$	262	\$	84	\$	346	\$	224	\$	263	\$	82	\$	7,565,624	
138%-150% FPL																				
2014	52,958	4,413	\$ 302	\$	56	\$	234	\$	88	\$	321	\$	278	\$	328	\$	(6)	\$	(325,029)	
2015	49,562	4,130	\$ 329	\$	57	\$	258	\$	91	\$	349	\$	288	\$	338	\$	11	\$	525,491	
2016	40,981	3,415	\$ 365	\$	59	\$	291	\$	99	\$	390	\$	312	\$	366	\$	24	\$	969,512	
2017	27,825	2,319	\$ 348	\$	60	\$	273	\$	91	\$	364	\$	271	\$	319	\$	45	\$	1,257,813	
2018	10,110	843	\$ 364	\$	61	\$	287	\$	95	\$	382	\$	391	\$	460	\$	(78)	\$	(785,832)	
Total	181,436	3,024	\$ 334	\$	58	\$	262	\$	92	\$	354	\$	294	\$	345	\$	9	\$	1,641,954	
150%-200% FPL										_										
2014	197,789	16,482	\$ 295	\$	100	\$	185	\$	61	\$	246	\$	215	\$	253	\$	(8)		(1,572,649)	
2015	213,552	17,796	\$ 320	\$	103	\$	207	\$	63	\$	270	\$	220	\$	259	\$	11	\$	2,366,974	
2016	220,760	18,397	\$ 337	\$	105	\$	221	\$	65	\$	286	\$	230	\$	270	\$	15	\$	3,393,862	
2017	223,948	18,662	\$ 385	\$	107	\$	263	\$	71	\$	334	\$	256	\$	301	\$	33	\$	7,388,557	
2018	223,833	18,653	\$ 421	\$	109	\$	297	\$	78	\$	374	\$	273	\$	321	\$	53		11,857,514	
Total	1,079,883	17,998	\$ 353	\$	105	\$	236	\$	68	\$	304	\$	240	\$	282	\$	22	\$	23,434,258	
Combined FPL										_										
2014	305,100	25,425	\$ 292	\$	78	\$	203	\$	58	\$	261	\$	235	\$	276	\$	(15)	\$	(4,481,180)	
2015	324,069	27,006	317	\$	80	\$	224	\$	60	\$	284	\$	237	\$	279	\$	6	\$	1,820,208	
2016	323,036	26,920	\$ 336	\$	83	\$	240	\$	62	\$	302	\$	247	\$	291	\$	11	\$	3,610,425	
2017	309,703	25,809	\$ 375	\$	87	\$	273	\$	64	\$	337	\$	261	\$	307	\$	30	\$	9,308,644	
2018	292,177	24,348	411	\$	91	\$	304	\$	71	\$	375	\$	281	\$	330	\$	45		13,078,320	
Combined Total	1,554,085	25,901	\$ 345	\$	84	\$	248	\$	63	\$	311	\$	252	\$	296	\$	15	\$	23,336,417	

Figures in the table may not sum due to rounding

BHP Option - Alte	ernate So	cenario 1				Revenue PMPM											Gain/(Loss)				
	Α	В		С		D		Е		F		ı		J		K		L		М	
			:	2nd										EHB	EHB						
			Lo	owest			Pre	emium			٠	Total	E	Benefit	Benefit			ЕНВ			
			(	Cost			Su	Subsidy		% Cost		ВНР	Estimated		ВНР		Benefit		E	HB Benefit	
	Member		S	ilver		Member 95		95% x		naring	S	ubsidy	Claims		Premium		Р	MPM	T	otal Dollars	
<b>BHP Eligible Cohort</b>	Months	Enrollment	Pre	emium	Pre	mium	(	C-D)	Sı	ıbsidy		E+F		Cost	J	/(1-15%)		I-K		AxL	
<100% FPL																					
2014	39,180	3,265	\$	278	\$	16	\$	249	\$	-	\$	249	\$	403	\$	474	\$	(225)	\$	(8,802,139)	
2015	42,229	3,519	\$	301	\$	16	\$	271	\$	-	\$	271	\$	404	\$	475	\$	(204)		(8,621,961)	
2016	42,349	3,529	\$	321	\$	16	\$	289	\$	-	\$	289	\$	424	\$	499	\$	(210)		(8,901,573)	
2017	42,472	3,539	\$	356	\$	17	\$	322	\$	-	\$	322	\$	446	\$	525	\$	(202)		(8,589,548)	
2018	34,629	2,886	\$	386	\$	17	\$	351	\$	-	\$	351	\$	462	\$	544	\$	(193)	\$	(6,671,642)	
Total	200,860	3,348	\$	327	\$	16	\$	295	\$	-	\$	295	\$	427	\$	502	\$	(207)	\$	(41,586,864)	
100-138% FPL																					
2014	15,172	1,264	\$	257	\$	33	\$	213	\$	74	\$	288	\$	337	\$	396	\$	(108)	\$	(1,645,900)	
2015	18,726	1,560	\$	277	\$	34	\$	231	\$	77	\$	308	\$	310	\$	365	\$	(56)	\$	(1,055,345)	
2016	18,947	1,579	\$	295	\$	35	\$	247	\$	80	\$	328	\$	318	\$	374	\$	(47)	\$	(886,619)	
2017	15,458	1,288	\$	333	\$	35	\$	282	\$	87	\$	369	\$	290	\$	341	\$	28	\$	435,659	
2018	23,604	1,967	\$	369	\$	36	\$	316	\$	96	\$	412	_	374	\$	440	\$	(28)	\$	(670,574)	
Total	91,907	1,532	\$	310	\$	35	\$	262	\$	84	\$	346	\$	329	\$	387	\$	(42)	\$	(3,822,779)	
138%-150% FPL			-														-				
2014	52,958	4,413	\$	302	\$	56	\$	234	\$	88	\$	321	\$	409	\$	482	\$	(160)		(8,488,154)	
2015	49,562	4,130	\$	329	\$	57	\$	258	\$	91	\$	349	\$	423	\$	498	\$	(149)		(7,367,391)	
2016	40,981	3,415	\$	365	\$	59	\$	291	\$	99	\$	390	\$	458	\$	539	\$	(149)		(6,097,543)	
2017	27,825	2,319	\$	348	\$	60	\$	273	\$	91	\$	364	\$	398	\$	468	\$	(105)		(2,912,899)	
2018	10,110	843	\$	364	\$	61	\$	287	\$	95	\$	382	\$	575	\$	676	\$	(294)	_	(2,974,040)	
Total	181,436	3,024	\$	334	\$	58	\$	262	\$	92	\$	354	\$	432	\$	508	\$	(153)	\$	(27,840,026)	
150%-200% FPL																					
2014	197,789	16,482	\$	295	\$	100	\$	185	\$	61	\$	246	\$	317	\$	373	\$	(127)		(25,160,491)	
2015	213,552	17,796	\$	320	\$	103	\$	207	\$	63	\$	270	\$	323	\$	380	\$	(111)		(23,626,381)	
2016	220,760	18,397	\$	337	\$	105	\$	221	\$	65	\$	286	\$	338	\$	397	\$	(112)		(24,670,265)	
2017	223,948	18,662	\$	385	\$	107	\$	263	\$	71	\$	334	\$	377	\$	443	\$	(109)		(24,377,734)	
2018	223,833	18,653	\$	421	\$	109	\$	297	\$	78	\$	374	\$	402	\$	473	\$	(98)	\$	(21,983,457)	
Total	1,079,883	17,998	\$	353	\$	105	\$	236	\$	68	\$	304	\$	352	\$	415	\$	(111)	\$(	119,818,328)	
Combined FPL																					
2014	305,100	25,425	\$	292	\$	78	\$	203	\$	58	\$	261	\$	345	\$	406	\$	(145)		(44,096,685)	
2015	324,069	27,006	\$	317	\$	80	\$	224	\$	60	\$	284	\$	348	\$	410	\$	(126)		(40,671,078)	
2016	323,036	26,920	\$	336	\$	83	\$	240	\$	62	\$	302	\$	363	\$	427	\$	(126)		(40,555,999)	
2017	309,703	25,809	\$	375	\$	87	\$	273	\$	64	\$	337	\$	384	\$	452	\$	(114)		(35,444,522)	
2018	292,177	24,348	\$	411	\$	91	\$	304	\$	71	\$	375	\$	413	_	485	\$			(32,299,713)	
Combined Total	1,554,085	25,901	\$	345	\$	84	\$	248	\$	63	\$	311	\$	370	\$	435	\$	(124)	\$(	193,067,997)	

Figures in the table may not sum due to rounding

BHP Option - Alte	ernate Sc	enario 2					Revenue PMPM											Gai	in/(Loss)		
	Α	В		С		D		E		F		ı		J		K		L	Ì	M	
			2	2nd										ЕНВ		EHB					
			Lo	west			Pre	emium				Total	В	enefit	I	Benefit		ЕНВ			
			C	Cost			Subsidy		95%	% Cost		ВНР	Estimated		в внр		Benefit		E	HB Benefit	
	Member		S	ilver		Member		95% x		naring		ubsidy	Claims		Premium		Р	MPM	T	otal Dollars	
<b>BHP Eligible Cohort</b>	Months	Enrollment	Pre	emium	Pre	mium	(	C-D)	Sı	ıbsidy		E+F		Cost	J	/(1-15%)		I-K		AxL	
<100% FPL																					
2014	39,180	3,265	\$	278	\$	16	\$	249	\$	-	\$	249	\$	301	\$	355	\$	(105)	\$	(4,122,943)	
2015	42,229	3,519	\$	301	\$	16	\$	271	\$	-	\$	271	\$	302	\$	355	\$	(84)	\$	(3,566,120)	
2016	42,349	3,529	\$	321	\$	16	\$	289	\$	-	\$	289	\$	317	\$	374	\$	(84)	\$	(3,573,624)	
2017	42,472	3,539	\$	356	\$	17	\$	322	\$	-	\$	322	\$	334	\$	392	\$	(70)	\$	(2,974,525)	
2018	34,629	2,886	\$	386	\$	17	\$	351	\$	-	\$	351	\$	346	\$	407	\$	(56)	\$	(1,928,921)	
Total	200,860	3,348	\$	327	\$	16	\$	295	\$	-	\$	295	\$	319	\$	376	\$	(80)	\$	(16,166,132)	
100-138% FPL																					
2014	15,172	1,264	\$	257	\$	33	\$	213	\$	74	\$		\$	252	\$	296	\$	(9)	\$	(131,993)	
2015	18,726	1,560	\$	277	\$	34	\$	231	\$	77	\$		\$	232	\$	273	\$	36	\$	665,048	
2016	18,947	1,579	\$	295	\$	35	\$	247	\$	80	\$		\$	238	\$	280	\$	48	\$	900,433	
2017	15,458	1,288	\$	333	\$	35	\$	282	\$	87	\$		\$	217	\$	255	\$	114	\$	1,763,117	
2018	23,604	1,967	\$	369	\$	36	\$	316	\$	96	\$	412	\$	280	\$	329	\$	83	\$	1,948,665	
Total	91,907	1,532	\$	310	\$	35	\$	262	\$	84	\$	346	\$	246	\$	290	\$	56	\$	5,145,269	
138%-150% FPL									,												
2014	52,958	4,413	\$	302	\$	56	\$	234	\$	88	\$		\$	306	\$	360	\$	(39)	\$	(2,059,922)	
2015	49,562	4,130	\$	329	\$	57	\$	258	\$	91	\$		\$	316	\$	372	\$	(23)	\$	(1,151,968)	
2016	40,981	3,415	\$	365	\$	59	\$	291	\$	99	\$		\$	343	\$	403	\$	(13)	\$	(532,436)	
2017	27,825	2,319	\$	348	\$	60	\$	273	\$	91	\$	364	\$	298	\$	350	\$	13	\$	371,420	
2018	10,110	843	\$	364	\$	61	\$	287	\$	95	\$	382	\$	430	\$	506	\$	(124)	\$	(1,250,888)	
Total	181,436	3,024	\$	334	\$	58	\$	262	\$	92	\$	354	\$	323	\$	380	\$	(25)	\$	(4,623,794)	
150%-200% FPL																					
2014	197,789	16,482	\$	295	\$	100	\$	185	\$	61	\$		\$	237	\$	279	\$		\$	(6,585,727)	
2015	213,552	17,796	\$	320	\$	103	\$	207	\$	63	\$		\$	242	\$	285	\$	(15)	\$	(3,157,343)	
2016	220,760	18,397	\$	337	\$	105	\$	221	\$	65	\$		\$	253	\$	297	\$	(12)	\$	(2,570,552)	
2017	223,948	18,662	\$	385	\$	107	\$	263	\$	71	\$	334	\$	282	\$	332	\$	3	\$	637,329	
2018	223,833	18,653	\$	421	\$	109	\$	297	\$	78	\$	374	\$	300	\$	353	\$	21	\$	4,665,359	
Total	1,079,883	17,998	\$	353	\$	105	\$	236	\$	68	\$	304	\$	264	\$	310	\$	(6)	\$	(7,010,936)	
Combined FPL																					
2014	305,100	25,425	\$	292	\$	78	\$	203	\$	58	\$		\$	258	\$	304	\$	(42)		(12,900,586)	
2015	324,069	27,006	\$	317	\$	80	\$	224	\$	60	\$	284	\$	261	\$	307	\$	(22)	\$	(7,210,383)	
2016	323,036	26,920	\$	336	\$	83	\$	240	\$	62	\$	302	\$	272	\$	320	\$	(18)	\$	(5,776,179)	
2017	309,703	25,809	\$	375	\$	87	\$	273	\$	64	\$	337	\$	287	\$	338	\$	(1)	\$	(202,660)	
2018	292,177	24,348	\$	411	\$	91	\$	304	\$	71	\$	375	\$	309	\$	363	\$	12	\$	3,434,215	
Combined Total	1,554,085	25,901	\$	345	\$	84	\$	248	\$	63	\$	311	\$	277	\$	326	\$	(15)	\$	(22,655,592)	

Figures in the table may not sum due to rounding

BHP Option - Alte	ernate Sc	enario 3					Revenue PMPM										Gain/(Loss)				
	Α	В		С		D		Е		F		I		J		K		L		М	
			- 2	2nd										EHB		EHB					
			Lo	west			Pre	mium			-	Total	В	enefit	- 1	Benefit		ЕНВ			
			C	Cost			Su	Subsidy		% Cost	BHP		Estimated		в ВНР		Benefit		Ε	HB Benefit	
	Member		S	ilver	Ме	Member		95% x		Sharing		Subsidy		Claims		Premium	P	MPM	T	otal Dollars	
<b>BHP Eligible Cohort</b>	Months	Enrollment	Pre	emium	Pre	mium	(	C-D)	Sı	ubsidy	ı	E+F		Cost	J	/(1-15%)		I-K		AxL	
<100% FPL																					
2014	39,180	3,265	\$	268	\$	16	\$	240	\$	-	\$	240	\$	279	\$	328	\$	(88)	\$	(3,443,898)	
2015	42,311	3,526	\$	289	\$	16	\$	260	\$	-	\$	260	\$	279	\$	329	\$	(69)	\$	(2,915,818)	
2016	42,431	3,536	\$	310	\$	16	\$	279	\$	-	\$	279	\$	294	\$	345	\$	(66)	\$	(2,797,522)	
2017	42,555	3,546	\$	346	\$	17	\$	313	\$	-	\$	313	\$	308	\$	363	\$	(50)	\$	(2,130,708)	
2018	34,713	2,893	\$	370	\$	17	\$	336	\$	-	\$	336	\$	320	\$	376	\$	(40)	\$	(1,402,409)	
Total	201,190	3,353	\$	316	\$	16	\$	284	\$	-	\$	284	\$	295	\$	347	\$	(63)	\$	(12,690,356)	
100-138% FPL																					
2014	15,172	1,264	\$	248	\$	33	\$	204	\$	72	\$	276	\$	233	\$	274	\$	2	\$	35,426	
2015	18,849	1,571	\$	266	\$	34	\$	221	\$	74	\$	295	\$	214	\$	252	\$	43	\$	809,239	
2016	19,072	1,589	\$	286	\$	35	\$	238	\$	78	\$	316	\$	220	\$	259	\$	57	\$	1,094,287	
2017	15,584	1,299	\$	323	\$	35	\$	273	\$	84	\$	357	\$	201	\$	236	\$	122	\$	1,893,982	
2018	23,732	1,978	\$	353	\$	36	\$	301	\$	92	\$	393	\$	259	\$	305	\$	89	\$	2,104,219	
Total	92,410	1,540	\$	299	\$	35	\$	251	\$	81	\$	332	\$	228	\$	268	\$	64	\$	5,937,154	
138%-150% FPL																					
2014	52,958	4,413	\$	292	\$	56	\$	224	\$	84	\$	308	\$	283	\$	333	\$	(25)	\$	(1,324,648)	
2015	49,745	4,145	\$	316	\$	57	\$	245	\$	88	\$	333	\$	292	\$	344	\$	(11)	\$	(535,516)	
2016	41,165	3,430	\$	353	\$	59	\$	280	\$	96	\$	376	\$	316	\$	372	\$	4	\$	150,949	
2017	27,990	2,333	\$	338	\$	60	\$	264	\$	88	\$	352	\$	275	\$	323	\$	29	\$	799,632	
2018	10,193	849	\$	349	\$	61	\$	273	\$	91	\$	364	\$	396	\$	466	\$	(101)	\$	(1,034,264)	
Total	182,052	3,034	\$	322	\$	58	\$	251	\$	89	\$	340	\$	298	\$	351	\$	(11)	\$	(1,943,848)	
150%-200% FPL																					
2014	197,789	16,482	\$	285	\$	100	\$	175	\$	58	\$	234	\$	219	\$	258	\$	(24)	\$	(4,813,996)	
2015	213,552	17,796	\$	308	\$	103	\$	195	\$	60	\$	255	\$	224	\$	263	\$	(8)	\$	(1,685,730)	
2016	220,721	18,393	\$	327	\$	105	\$	211	\$	63	\$	273	\$	234	\$	275	\$	(2)	\$	(355,982)	
2017	223,931	18,661	\$	374	\$	107	\$	253	\$	69	\$	322	\$	261	\$	307	\$	15	\$	3,429,567	
2018	223,899	18,658	\$	404	\$	109	\$	280	\$	75	\$	354	\$	278	\$	327	\$	27	\$	6,128,432	
Total	1,079,893	17,998	\$	341	\$	105	\$	224	\$	65	\$	289	\$	244	\$	287	\$	3	\$	2,702,289	
Combined FPL																					
2014	305,100	25,425	\$	282	\$	78	\$	193	\$	56	\$	249	\$	239	\$	281	\$	(31)	\$	(9,547,116)	
2015	324,457	27,038	\$	304	\$	80	\$	213	\$	57	\$	270	\$	241	\$	283	\$	(13)	\$	(4,327,826)	
2016	323,390	26,949	\$	325	\$	83	\$	230	\$	60	\$	290	\$	251	\$	296	\$	(6)	\$	(1,908,268)	
2017	310,061	25,838	\$	364	\$	87	\$	263	\$	62	\$	325	\$	266	\$	312	\$	13	\$	3,992,473	
2018	292,538	24,378	\$	394	\$	91	\$	288	\$	68	\$	356	\$	285	\$	336	\$	20	\$	5,795,977	
Combined Total	1,555,545	25,926	\$	333	\$	84	\$	237	\$	60	\$	297	\$	256	\$	301	\$	(4)	\$	(5,994,760)	

Figures in the table may not sum due to rounding



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